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DETAILED REPORT OF EXPLORATIONS IN
CENTRAL ASIA AND WESTERNMOST CHINA

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DETAILED REPORT OF EXPLORATIONS IN CENTRAL ASIA AND WESTERNMOST CHINA

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AUREL STEIN, K.C.I.E.

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F. M. G. LORIMER, C. L. WOOLLEY, AND OTHERS; AND
APPENDICES BY J. ALLAN, L. D. BARNETT
L. BINYON, É. CHAVANNES, A. H. CHURCH
A. H. FRANCKE, A. F. R. HOERNLE, T. A. JOYCE
R. PETRUCCI, K. SCHLESINGER, F. W. THOMAS

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CHAPTER XIV

THROUGH THE LOP DESERT TO TUN-HUANG

Section I.—THE ROUTE FROM ABDAL TO TUN-HUANG

Halt at Abdal.

On February 11 my labours at the Mīrān site were completed, and by the evening of the same day my camp was again shifted to Abdal. There the safe packing of all the antiques which had now to be sent back to Kāshgar (Fig. 147) and multifarious preparations kept me hard at work for nine days.

Geographical observations on journey.

On February 21, 1907, I started my caravan, heavily laden with supplies for the new field of exploration to the east. In my Personal Narrative I have given a full account of the trying journey which carried me in the course of three weeks to the westernmost oasis of Kan-su.[1] Here a brief summary of the characteristic features of the desert ground traversed,[2] and a rapid review of the data that we possess regarding the historical topography of the route, must suffice. On certain geographical questions which the survey of this route has raised much fresh light has been thrown by the far more extensive surveys which I was able to make over this forbidding ground, during the winters of 1914 and 1915.[3] But these topographical results still await publication by the Trigonometrical Survey Office, Dehra Dun.

Two routes to Tun-huang.

There are, and during historical times always have been, two possible direct routes connecting the Lop tract south of the Tārīm with Tun-huang, and thus with westernmost China.[4] One somewhat the longer, but practicable throughout the year in spite of difficulties caused by scarcity of water and grazing, passes along the high, barren slopes of that eastern extension of the main K'un-lun range which to the people of the Lop tract is known as the Āltin-tāgh or 'Fore-mountains'. This route was surveyed under my instructions by Rai Rām Singh in 1907, and again by R. B. Lāl Singh in 1913; it is shown on the maps, but for the present need not concern us further. The Lopliks know it as the *tāgh-yol*, or 'mountain route'. The other route, distinguished by them as the *chöl-yol*, 'desert route', follows throughout the deepest line of the long-stretched depression which intervenes between the Kuruk-tāgh in the north and the glacis-like foot of the Āltin-tāgh in the south.

Past the Kara-koshun.

It is this 'desert route' which we have briefly to sketch here. Pronounced differences in the character of the ground divide it into three main sections. The first, comprising a total marching distance of some 158 miles, skirts the whole length of the Lop lake-basin on the south. It starts by winding round the southern edge of the Kara-koshun marshes. Then it keeps close to the south shore of the vastly greater salt-encrusted lake-bed, now dry, to which in Chapters X and XI I have so often had occasion to refer.[5] At Donglik, the first halting-place from Abdal, where the two routes through the desert and the mountains divide, the difficulty about water already made itself felt; for the small stream there, appropriately known as Achchik-bulak, 'the bitter spring', is salt.

Salt-encrusted old lake-bed.

A double march of some forty-five miles over waterless ground, overlooking the dried-up, salt-encrusted lake-bed, brings the traveller to the salt spring of Chindailik. Beyond this, the present caravan track for sixteen miles cuts across the hard, crumpled, salt-cake surface of what was a big bight of this ancient Lop sea (see Map No. 64. A, B. 2). Professor E. Huntington had here noted the

[1] See *Desert Cathay*, i. pp. 503–46; ii. pp. 1–8.

[2] Cf. Maps Nos. 61, 64, 67, 68, 70, 74, 78.

[3] Cf. *Geogr. Journal*, 1916, xlviii. pp. 126 sqq., 205 sqq.

[4] See above, pp. 320, 340, 418.

[5] For the explorations on its north side effected in 1914–15, cf. *Third Journey of Exploration*, *Geogr. Journal*, 1916, xlviii. pp. 126 sqq. [See now also, *Geographical Review* (New York), 1920, ix. pp. 25 sqq.]

interesting fact that an earlier track led along the edge of the gravel terraces which mark the old lake shore, and thus avoided the troublesome crossing of the hard *shōr*.[6] There were no means of judging when its use had been discontinued. But the existence of this track round the bay creates a strong presumption that there had remained here an impassable salt marsh within historical times, necessitating the great detour.

Ancient shore-line of lake-bed.

The route further on again hugs the gravel terraces of the ancient shore-line and thus continues to the halting-places of Lowaza (Fig. 145) and Kōshe-langza, where drinkable, if brackish, water is found together with patches of scrub and reeds. Beyond Kōshe-langza, the continuous line of steep clay terraces disappears on the south, and the route for two marches onwards follows a narrow, scrub-covered belt skirting the edge of the great salt-encrusted lake-bed, which extends its level and absolutely bare flat unbroken towards the north, like a sea still in being. Between the stages of Panja and Achchik-kuduk (Maps Nos. 68, 67) this belt of vegetation covers a strip of salt marsh fringing the dried-up lake-bed.[6a] Beyond Achchik-kuduk, 'the bitter well' (Map No. 67. B. 4), the ground shows such marked changes in natural features that the first section of the route may appropriately be considered to end there.

East bay of ancient Lop sea.

To the north, beyond the bay of the ancient Lop sea, I could now see a terminal spur of the southernmost hill chain of the Kuruk-tāgh, rising at a distance of only about seventeen miles. Thence the low, barren range was seen trending steadily towards the north-east. Parallel to it, but on the south of the route and at no great distance, there extended a long ridge covered by huge dunes of drift-sand about 400 feet in height. It distinctly recalled the great sand ridges found along the terminal river-courses in the Taklamakān. The bearing of this ridge was also to the north-east, and its base was formed of clay. It was the same with the eroded terraces, or Mesas, up to 40 feet in height and more, which, isolated or in whole strings, stretched out from its foot northward.

Desert valley of Bēsh-toghrak.

The ground through which the route leads from Achchik-kuduk to beyond Bēsh-toghrak, for a total marching distance of over 80 miles, bears the unmistakable impress of a great desert valley, flanked by the Kuruk-tāgh on the north and the sand-buried glacis of the Āltin-tāgh on the south. The Maps (Nos. 70, 74) show this clearly enough, and detailed surveys, made in 1914, have established the fact still more plainly.[7] A continuous series of accurately observed levels has in particular proved that the ground, which over the vast area covered by the dry, salt-encrusted bottom of the ancient Lop sea presents a practically dead flat, rises from the easternmost inlet near Kum-kuduk, where the base for the levelling operations was situated, with a gentle but steadily ascending slope to beyond Bēsh-toghrak.[8] There it meets the westernmost end (Map No. 70. D. 2, 3) of a geographically very interesting series of depressions, in which, I believe, we may recognize an ancient terminal basin of the Su-lo Ho draining the great mountain ranges south and south-east of Tun-huang.

Though this now dried-up terminal river basin presents peculiar features of its own, there are reasons which make it convenient for us to include it in the second section of the route. This may be considered to extend from the Achchik-kuduk well almost to the great marshy basin which now

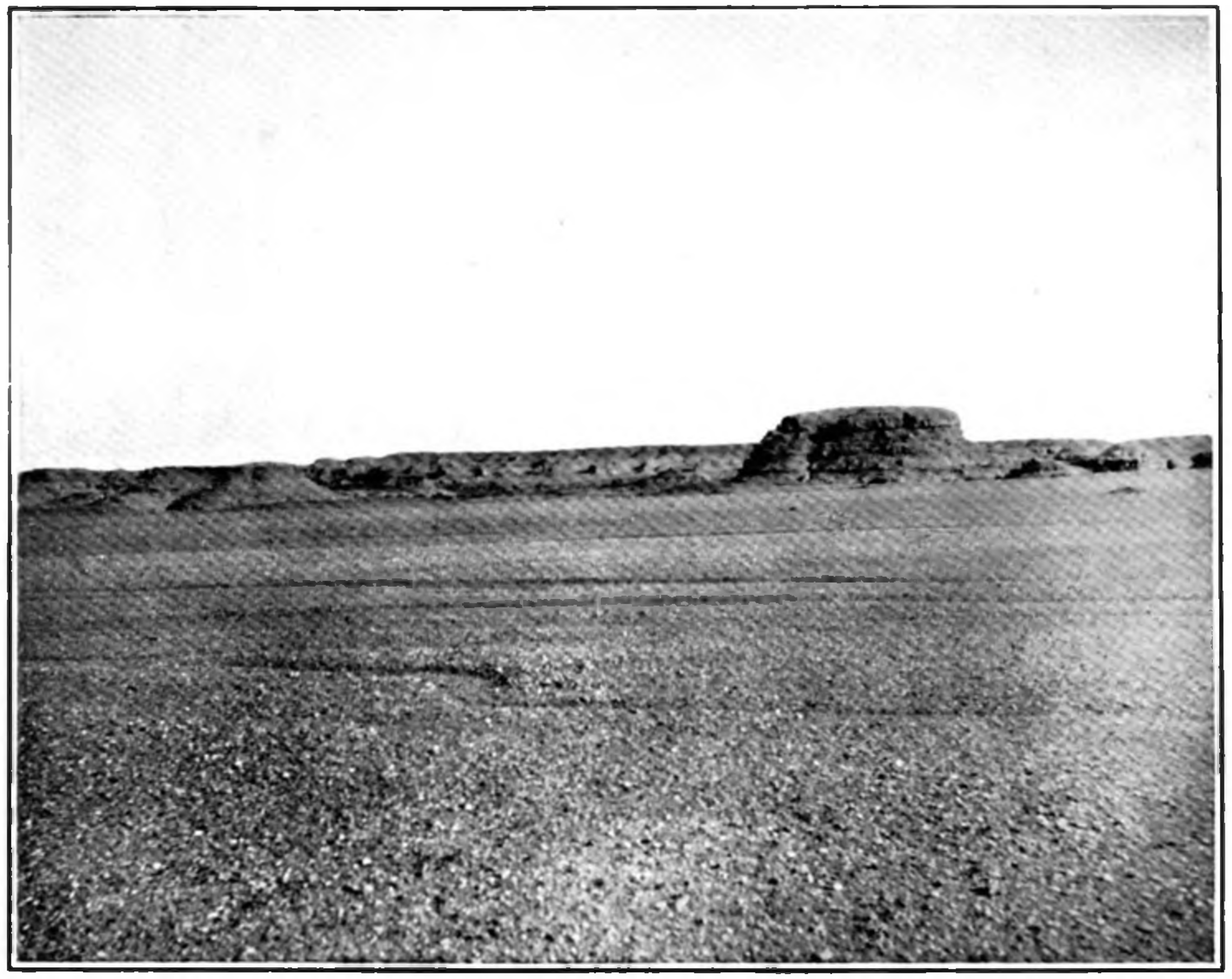
[6] See Huntington, *The Pulse of Asia*, pp. 290 sq.

[6a] My explorations of 1914 have proved that the bottom of the ancient Lop sea extends its easternmost and gradually narrowing bay of hard salt crust approximately to 92° 18′ longitude, and thus considerably further than our survey, as recorded in Maps Nos. 67, 70, had led me to assume.

[7] Cf. *Geogr. Journal*, 1916, xlviii. p. 129. The above geographical main fact is in no way affected by the necessity, which these surveys have proved, of modifying in an important detail the delineation of the ground north of the route from Achchik-kuduk to near Yantak-kuduk, as shown on Maps Nos. 67 and 70. The salty steppe with scrub and reeds (coloured light green) does not extend there further than about two miles north of the line of route, and beyond that limit gives way to the absolutely bare salt-crust surface of the above-mentioned easternmost inlet of the ancient Lop sea basin. In some places the bottom of this inlet still retained the condition of a salt bog. Its extreme eastern end was found to extend with a width of some two miles to about 92° 18′ long., due north of Yantak-kuduk (Map No. 70. B. 3).

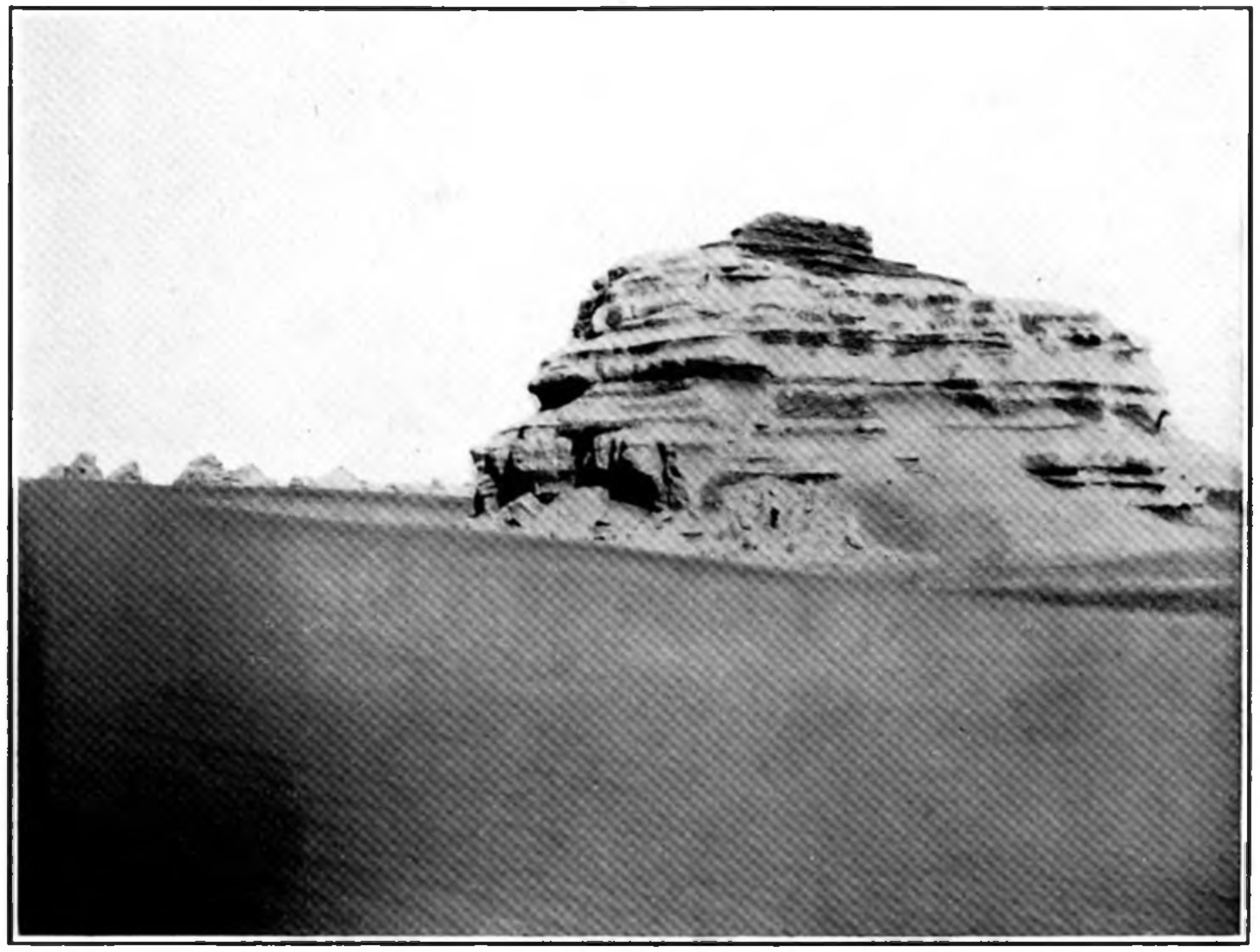
[8] The rise over the levelled line of sixty miles from north of Kum-kuduk to the western shore-line of the depression beyond Bēsh-toghrak was exactly 250 feet.

145. VIEW FROM SALT SPRINGS OF LOWAZA WESTWARDS ALONG SHORE OF SALT-ENCRUSTED LOP LAKE BASIN.



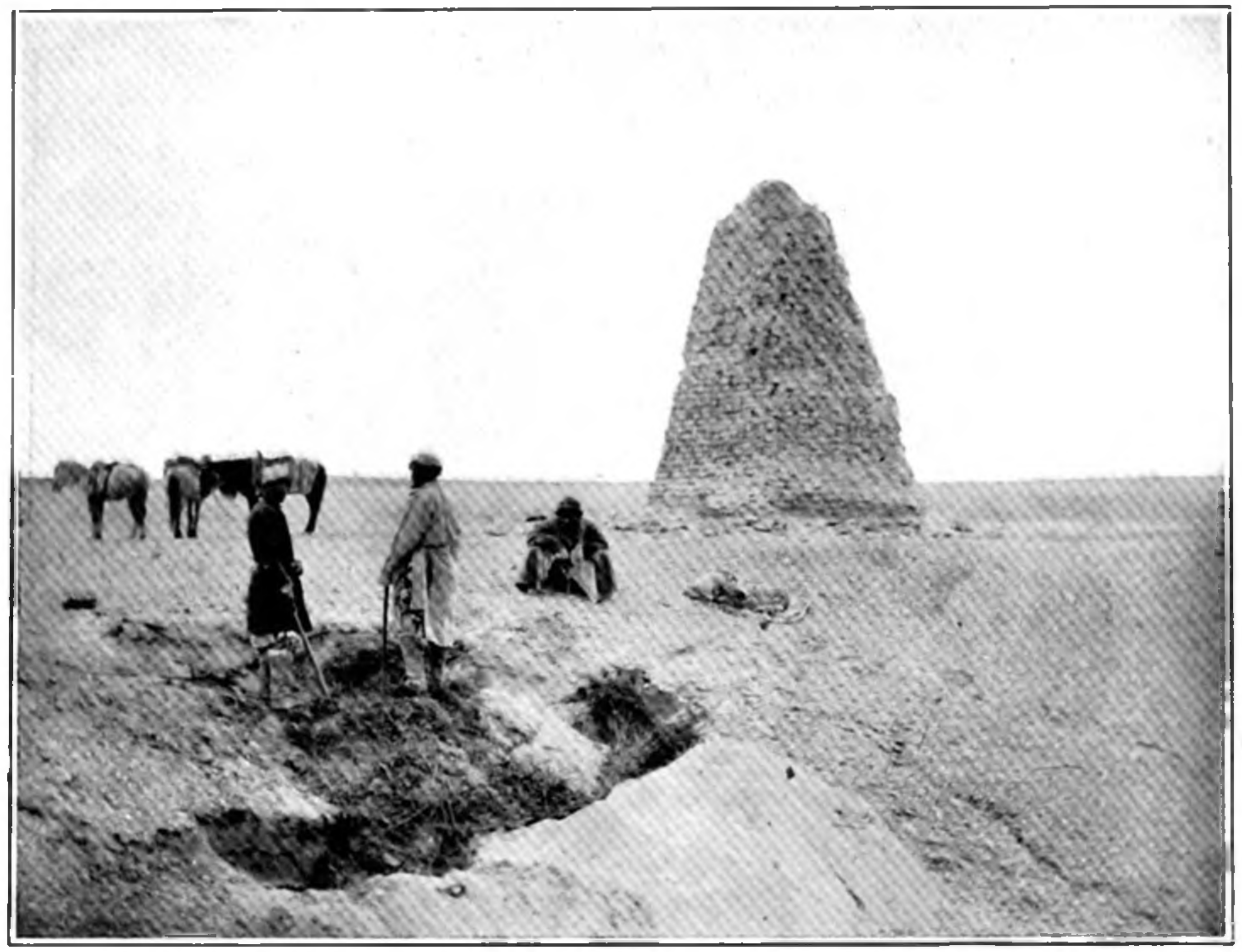
146. ISOLATED CLAY TERRACES IN DEPRESSION WEST OF T. XXIII, TUN-HUANG LIMES.

147. CONVOY WITH ANTIQUES STARTING FROM ABDAL FOR KĀSHGAR.

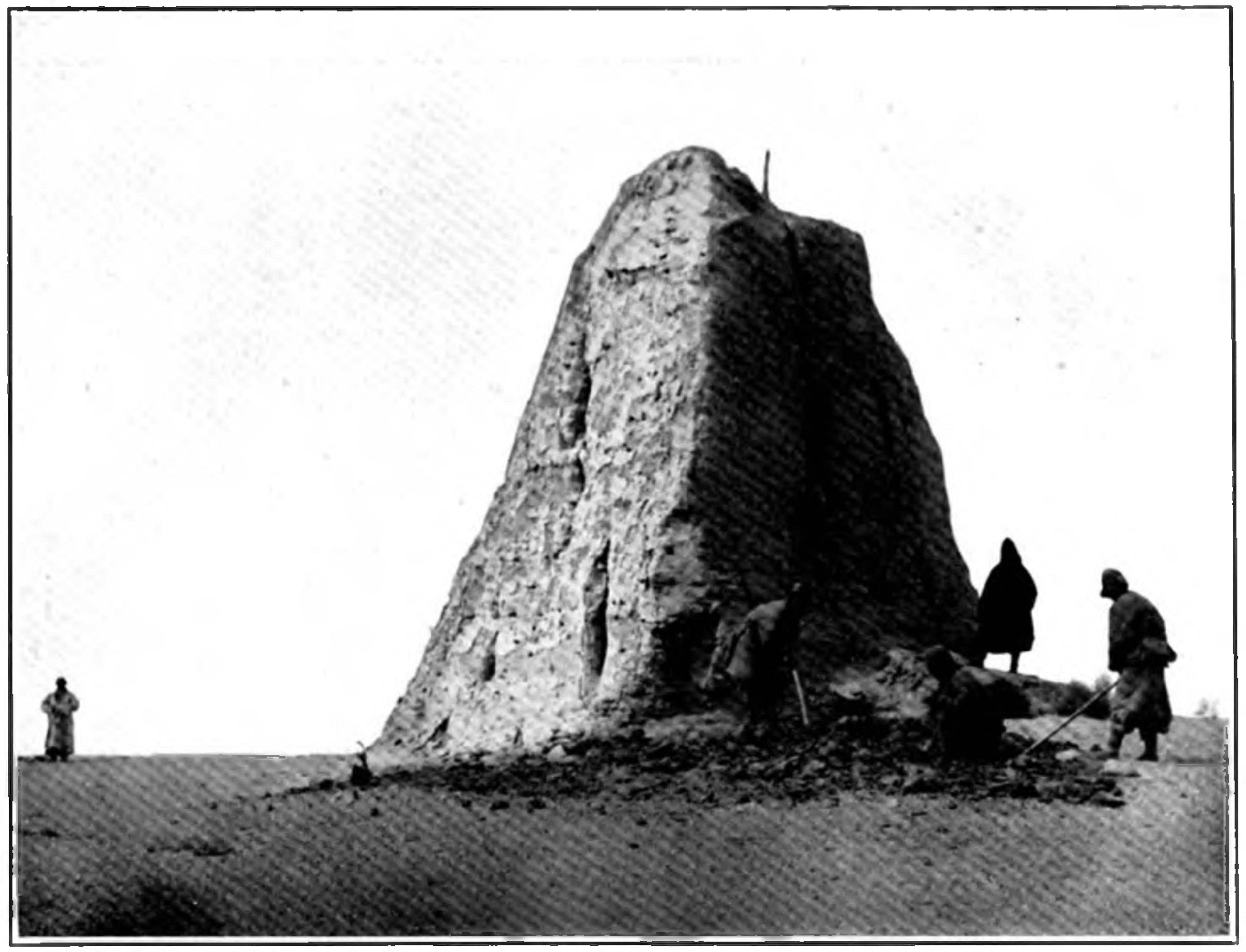


148. ERODED CLAY TERRACE (MESA) NEAR WESTERN EDGE OF ANCIENT TERMINAL BASIN OF SU-LO HO, N.W. OF CAMP 153.

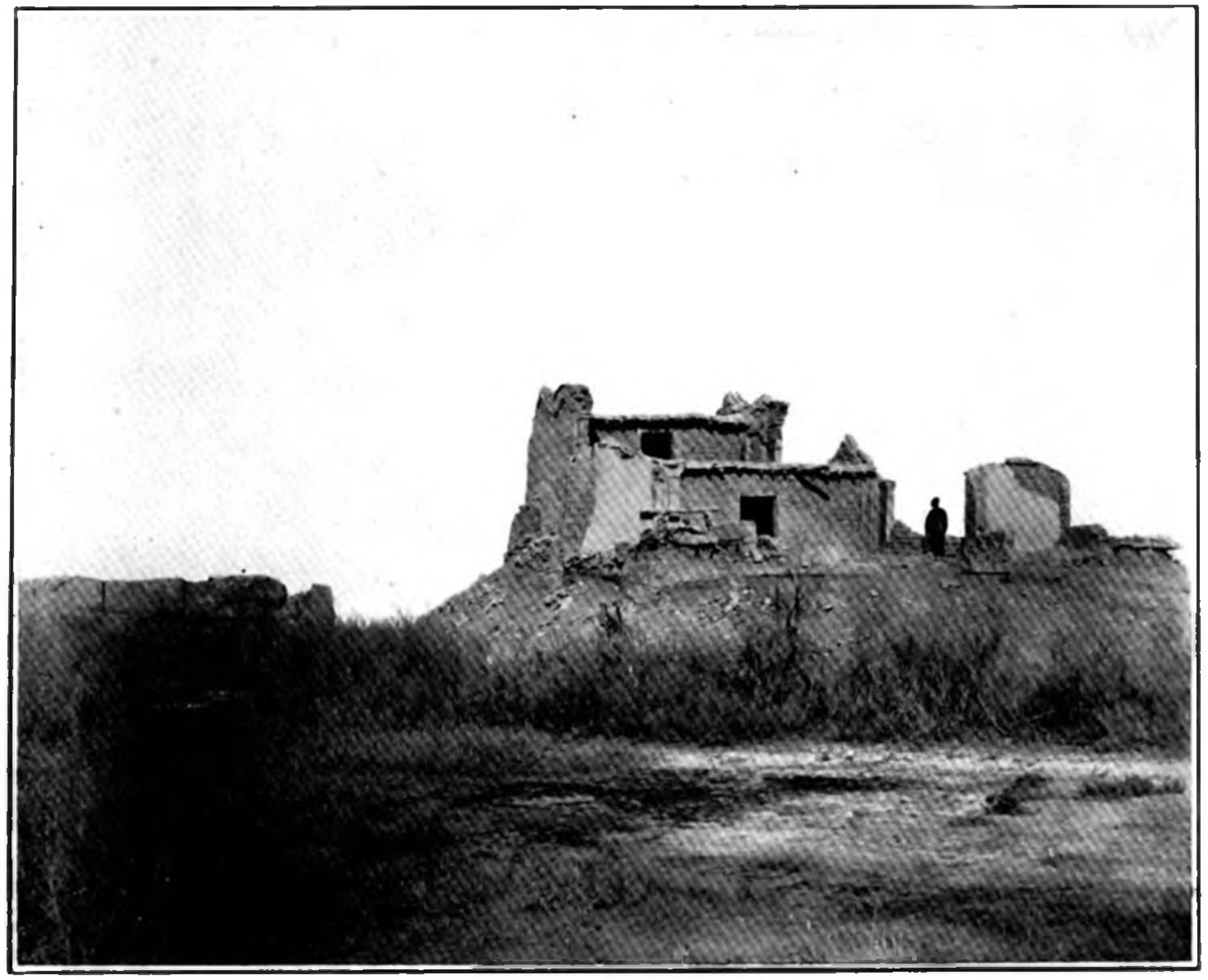
For an estimate of height see small figure of man standing at foot of terrace.



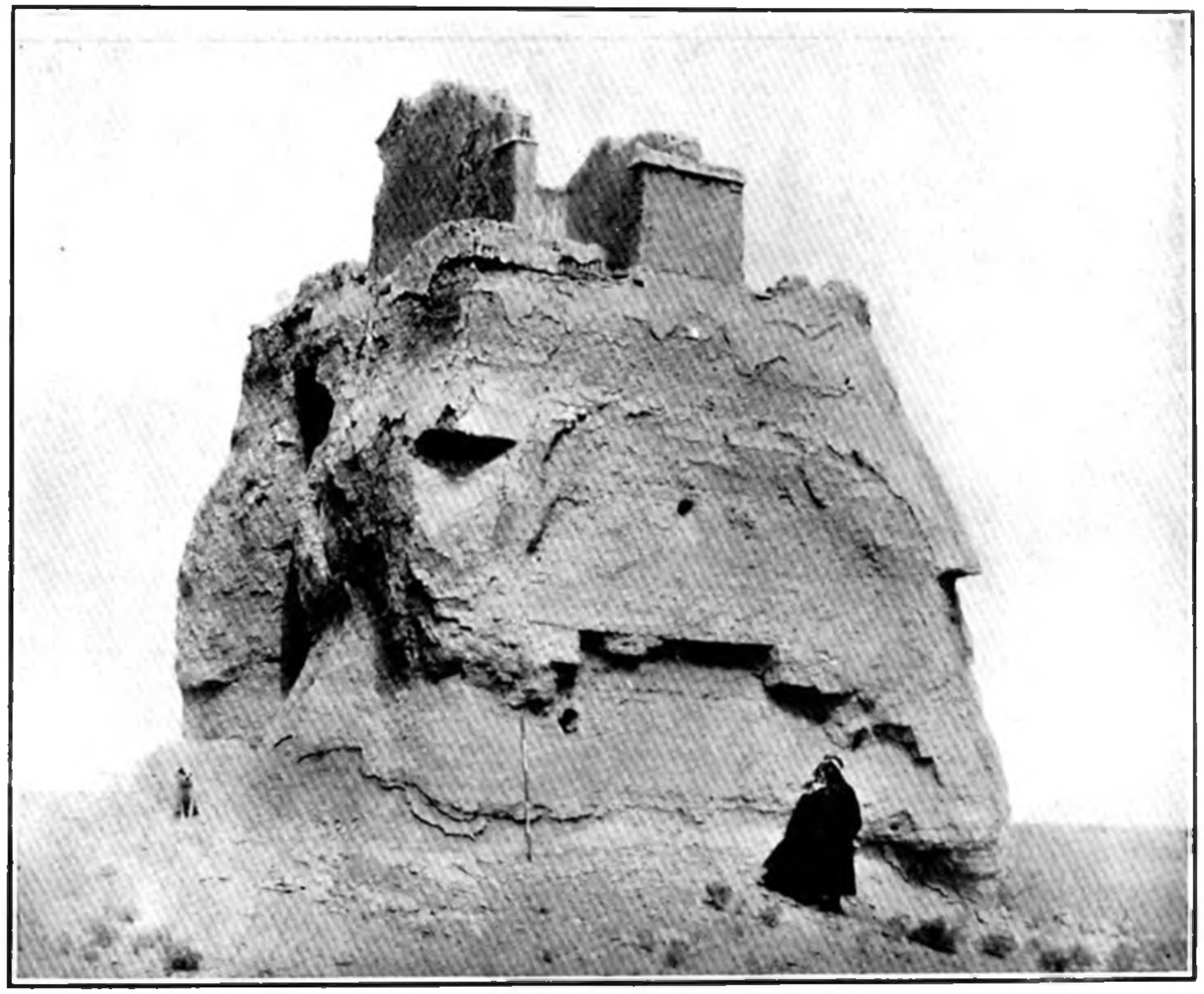
149. RUIN OF ANCIENT WATCH-TOWER T. III, TUN-HUANG LIMES, SEEN FROM EAST.
Two men standing in foreground at spot where first discovery of an early Chinese record on wood was made.



150 RUINED WATCH-TOWER T. XXVI, TUN-HUANG LIMES, WITH REFUSE HEAP, SEEN FROM S.W.



151. RUINS OF TEMPLE DESTROYED BY TUNGANS, AT SHIH-PAN-TUNG, N. OF TUN-HUANG.



152. RUINED WATCH-TOWER T. XXV, NORTH OF TUN-HUANG, SEEN FROM SOUTH-WEST.

receives practically the whole of the Su-lo Ho drainage (Map No. 74. A. 3, 4). The characteristics of this second section of the route, over 96 miles long, are clearly determined by the fact that, instead of skirting as the first did the utterly desolate shores of the dried-up salt sea, it leads along a great valley. Desert ground as it is, it carries enough subsoil moisture to feed wells of drinkable water at numerous points and close to the surface, and also to maintain more or less continuous belts of reed and scrub growth. The soil is sandy throughout, no longer *shōr* or gravel, and the desert vegetation it supports steadily increases after Yantak-kuduk is passed. Fresh water can be found by digging within a few feet of the surface at most places as far as Bēsh-toghrak. There reed and scrub grazing is sufficiently abundant, and even a few stunted wild poplars may be seen, which account for the name, the 'Five Poplars', now given to it by the Lopliks. As we advance from Achchik-kuduk north-eastwards the valley gradually narrows. The long dune-covered ridge on the south approaches closer and closer to the foot of the barren Kuruk-tāgh range; this rises here to about 1,500 feet above the valley bottom, which at Bēsh-toghrak contracts to only about five miles in width.

Subsoil water of desert valley.

Wells of Bēsh-toghrak.

The second section of the desert route as far as Bēsh-toghrak offers none of the serious difficulties encountered on the first. To the east of Bēsh-toghrak, however, the character of the ground undergoes a notable change. There, after a distance of about five miles, a belt of dunes rising to 40–50 feet in height is encountered, and after crossing this the route strikes the westernmost of a series of depressions constituting a dried up terminal basin of the Su-lo Ho. In my Personal Narrative a detailed account has been given of the interesting physical features encountered on crossing this basin to a point near its eastern head.[9] In it I have also explained the special interest attaching to the geographical questions which those features raise.[10]

Ancient terminal basin of Su-lo Ho.

The presence of subsoil water within easy reach, which alone makes the valley descending from Bēsh-toghrak to the eastern extremity of the ancient Lop lake-bed practicable for traffic, is directly due to the fact that a certain portion of the Su-lo Ho drainage, at least during its big summer floods, must still find its way somehow, probably underground, into the depressions of its earlier

Subsoil water from Su-lo Ho drainage.

[9] Cf. *Desert Cathay*, i. pp. 532 sqq.

[10] The geographical importance of this ground induced me to make further surveys there on my next passage in March, 1914. Their results, while confirming my former conclusion as to the general character of this area, necessitate the modification of certain details in its cartographical delineation as presented in Map No. 74. A. 3. They are duly shown in the new series of maps, comprising the surveys made on my third journey as well as on the previous expedition. Among them there is one detail of importance which I am glad to have an opportunity of correcting here.

R. B. Lāl Singh, when carrying his plane-table survey in March, 1914, under my instructions to the south of the above described series of depressions, ascertained that the final northward turn given in Map No. 74. A. 3 to the present terminal course of the Su-lo Ho, suggesting that its water could eventually reach the dry basin shown south of Camp 153, is erroneous. Rai Rām Singh, when making a reconnaissance survey of this area in May, 1907, had from Camp 174 sketched the Su-lo Ho bed, down to the approximate point marked by the letters SU in the map, with very fair accuracy. He had, however, failed to see that the northward turn of the bed was not final, but only a bend followed by a sharp turn to the south-west. This is succeeded by a westward course of about four miles leading to where the river in 1914 terminated in a narrow lake about seven miles long that stretched from north to south and was bordered by *shōr* belts. It probably connected at the flood season with the lake-bed shown further south in Map No. 70. D. 4.

In reality the high and well-marked plateau of conglomerate covered with gravel, which in the map is shown extending north of the actual Su-lo Ho bed as far as the northward bend (wrongly assumed as final), stretches right across westwards and joins the ridge correctly shown on the western edge of Map No. 74. A. 3 and continued in Map No. 70. D. 3. The statement made in *Desert Cathay*, i. p. 535 (top), requires to be modified accordingly.

It is worth notice that the continuity and width of this intervening plateau makes it appear still more probable that the drainage, of which I observed such plentiful evidence on my examination of the northern basin in 1914, finds its way there through the northern beds of the delta, now ordinarily dry (Map No. 74. B. 3), and not by percolation from the southern terminal basin, as might be otherwise assumed.

In justice to my surveying assistant on the former journey I ought to add that his mistake must be ascribed partly to the very deceptive nature of the ground and partly to the fact that he had to make his survey under exceptionally trying climatic conditions and at a time when his health was seriously affected.

terminal basin. In some of these I clearly observed the marks of quite recent inundation, both in 1907 and in 1914. At the same time the soil, still wet over extensive areas, showed so little salt efflorescence as to make it obvious that the water which reached them had been relatively fresh and been drained away by percolation before it could become completely evaporated.[10a]

Deceptive ground of terminal basin.

The ground over which the route leads, where it skirts or traverses this ancient terminal basin, is very deceptive. Neither in the soft, sandy soil of the depressions, nor among the dunes of the broad sand ridges which divide them, can any traces of the track survive from one season of caravan traffic to another. The difficulty which travellers experience about discovering and following the right track is greatly increased by the hundreds of high clay terraces which, scattered in clusters or rows, rise like islands or towers over great portions of the wide basin (Fig. 148).[10b] It would be easy for wayfarers, if unguided, to lose the right bearing where these mazes of fantastic clay terraces are encountered, and to stray away into the hopelessly barren desert north or south of the basin, which, with its wilderness of Mesas and sand-dunes, acts like a great curtain.

Terminal bed of Su-lo Ho.

That first march from Bēsh-toghrak had brought us close to the eastern end of the strange basin just described. Our guide had failed to strike the brackish well which hereabout serves as a halting-place. But on the following morning, March 7, we had only gone about three miles when the track, now quite clear in coarse sand and gravel, brought me to a deeply-cut and well-defined flood-bed descending from the east. It was easy to realize that we had reached here the debouchure of an old terminal branch of the Su-lo Ho, and on following the track up the cliffs of its steep right bank I was struck by the sudden and complete change of the ground. Eastward, there spread out a flat gravel-covered expanse, broken only here and there by shallow depressions. To the north, the view was bounded by the low Kuruk-tāgh hills in the distance. The atmosphere was not clear enough then to permit the big snowy range about Anambar-ula to be sighted as it could be on later occasions. Yet there was no doubt possible here that the route had entered the great open valley trough of the Su-lo Ho and approached the marshy expanse forming its present terminal basin. The edge of this lay within only six miles or so of the point on the gravel plateau to which the route had now brought me.

Last section of route to Tun-huang.

It is true that the ground previously traversed was also an old terminal basin, and that, through it and the valley of Bēsh-toghrak beyond, the waters of the Su-lo Ho may at an earlier, but geologically, perhaps, not very distant, period have made their way down to the ancient Lop sea, since dried up. But acceptance of this theory can in no way weaken the impression that the route at this point enters its third and last section. It brings us in five convenient stages, making up a total marching distance of about 97 miles, to the centre of the large oasis of Tun-huang, the westernmost outpost of China towards Eastern Turkestān and the base of its earliest Central-Asian operations. Along the whole length of this section the caravan track, following the line of the ancient Chinese route, leads close to the bed of the Su-lo Ho or else past a string of freshwater lagoons fed by the Tun-huang drainage. With plentiful good water and abundance of grazing at convenient intervals, movement along this line is easy at all seasons. Though the ground still continues incapable of cultivation, it is fit for grazing over considerable areas of the riverine belt, and the traveller soon begins to feel that the true desert has been left behind.

This marked geographical change finds its striking reflection in the fact that the westernmost

[10a] The fact that flood water from the Su-lo Ho could find its way even now towards this earlier terminal basin, whether by percolation or otherwise, is clearly proved by the dry river-beds traced north of the present terminal course of the Su-lo Ho and forming part of its delta (Map No. 74. A, B. 3).

[10b] There is no doubt that they are 'witnesses' due to erosion, and the fact that they are found also round Lake Khara-nōr further east, and near the actual terminal basin of the Su-lo Ho on the south, bears strong testimony to the lacustrine character of the depressions crossed by the route east of Bēsh-toghrak. Cf. below, pp. 575 sq., 589, 642 sq., 717.

portion of the ancient Chinese *Limes*, the true end of the great 'Chinese Wall' once guarding the confines of the empire, was proved by my explorations to have been extended practically along the whole length of this last, or riverine, section of the Lop-Tun-huang route. These explorations and surveys, owing to the abundant archaeological results which they yielded, will claim a detailed account in this and subsequent chapters. Before, however, I proceed to this, it will be convenient first to review succinctly the data we possess for the historical topography of the whole route.

Route skirts ancient Chinese Limes.

Section II.—CHINESE RECORDS OF THE LOP DESERT ROUTE

Earliest history of route.

When dealing above in Chapter IX with the Chinese historical records concerning the Lop region, I have had occasion to examine in detail the main topographical data in the often-discussed story of the earliest expansion of Chinese trade and power into the Tārīm Basin.[1] I have shown there how great was the part played in it by the route, then newly opened, which led from the Chinese advanced base at Tun-huang westwards to the territory of Lou-lan adjoining Lop-nōr. I do not intend to recapitulate here the evidence proving that the traffic, commercial as well as military, which passed into the Tārīm Basin after the events following Chang Ch'ien's famous mission (*circ.* 136–123 B.C.), must have followed mainly the route leading north of the dried-up Lop lake-bed to that now wholly waterless portion of the Lop territory marked by the Lou-lan sites. Nor can I describe here the difficult but successful explorations starting from these sites which, in the winter of 1914, enabled me to trace this route right through to the point where its line must have joined the present desert route from Lop to Tun-huang. The brief preliminary account of them given elsewhere will at present suffice for purposes of reference.[2] With the limitation thus implied as regards the earliest period, I propose briefly to review here whatever data we can glean from sources at present accessible that bear on the historical topography of the route described in the preceding section.

Direct line leading through Lou-lan.

When dealing above with the notices furnished by the Former Han Annals about Shan-shan, or Lou-lan, I have already had occasion to discuss in detail the important, if scanty, indications they supply as to the main route leading to it from Tun-huang. I have shown there that, with the object of gaining the most direct access to the great northern string of oases forming, then as now, the easiest military and trade road from east to west through the Tārīm Basin, the Chinese first laid their main route to the north-eastern portion of the then habitable Lop territory, and made the ground marked by the remains of the Lou-lan sites as it were their bridge-head beyond the ancient Lop lake-bed.[3] This route, after first skirting the north-eastern shores of this great salt-encrusted waste, crossed its northern extension where it is narrowest. The physical difficulties encountered were very serious. But they were more than compensated by the saving of a great détour south, and by the advantage of bringing the Chinese troops and traders to cultivated ground with all its facilities in the way of supplies, etc., far sooner than it could have been reached by the route leading along the southern shore of the ancient Lop sea. A reference to the general map will show that from Bēsh-toghrak the Lou-lan Site (L.A.) is close on 70 miles nearer than Mīrān.

[1] Cf. above, pp. 335 sqq.

[2] See *Third Journey of Exploration*, *Geogr. Journal*, 1916, xlviii. pp. 124 sqq.

[3] For the position and character of the ruined *castrum* L.E. to the north-east of the Lou-lan Site, which I discovered in 1914 and which represents the earliest Chinese *point d'appui* on the Lou-lan side, cf. *Geogr. Journal*, xlviii. p. 124. In the rough provisional sketch-map attached to this paper the position of this *castrum* is marked approximately below the D of the entry DESERT.

Reference may conveniently be made to this sketch-map also for the ancient route leading eastwards to Bēsh-toghrak. But, besides the much reduced scale, the fact should be kept in view that the sketch was compiled for provisional use only, and before the results of astronomical and triangulation observations could be computed.

'Lou-lan route' traced.

It is on this northern branch of the Lop–Tun-huang route, which for brevity's sake we may call the 'Lou-lan route', that I was able correctly to locate in 1914 the dreaded 'White Dragon Mounds', which the Former Han Annals describe as opposite to 'the extreme eastern border of the kingdom of Lou-lan where it approached nearest to China',[4] and to which references are made also in later records.[5] There were also important antiquarian 'finds', as recorded in the preliminary account of my explorations of 1914, which helped me to follow the Lou-lan route over its desolate westernmost portion on either side of the 'White Dragon Mounds'. It is traceable even more accurately over the eastern portion. Geographical and archaeological evidence makes it quite certain that it must have followed the line marked by the ancient Chinese Limes along what I have above described as the third section of the present desert route from Lop to Tun-huang. It is there that I discovered the site of the famous *Yü-mên* or 'Jade Gate', from which the route to Lou-lan is declared by the Annals to start.[6]

Central portion of Lou-lan route.

As regards the remaining intermediate, or central, portion of the ancient Lou-lan route we also possess safe guidance. My explorations of 1914 have proved that the easternmost inlet of the ancient lake-bed, with its difficult and in places treacherous surface of dried-up salt bog, extends as far as the neighbourhood of Yantak-kuduk (Map No. 70. B. 3). They have further shown that, east of this point, water and camel-grazing are also obtainable along the northern edge of what for brevity's sake I may call the Bēsh-toghrak valley. This northern edge is certainly the shortest line towards Lou-lan, and I therefore conclude that the ancient Han route to Lou-lan followed it, branching off from the present desert route somewhere about Bēsh-toghrak. There are some archaeological indications supporting this conclusion, but their record must be reserved for a future publication dealing with the results of my third expedition.[7] From Bēsh-toghrak eastwards we may safely assume that the Han route skirted the southern edge of, or passed through, the ancient terminal basin I have described above, more or less along the present line of route; for, as Map No. 74. B. 3 shows, the antiquity of this is distinctly attested by the bearing of the line on which the advanced towers of the Limes, T. I, II, are erected, since it approaches the south-eastern edge of the basin within about eight miles and forms a direct continuation of the former line.

Difficulties of western portion.

The account given elsewhere of the trying journey by which, in the winter of 1914, I succeeded in tracing the western portion of the ancient Lou-lan route through that absolutely barren waste of salt, clay, and gravel, will suffice to show how formidable the difficulties encountered here must have been.[8] Over a distance which in ancient times, too, must have been fully 120 miles if not more, there was neither water nor grazing nor fuel. How those old Chinese organizers of transport under the Emperor Wu-ti succeeded in overcoming these obstacles and opening up the route as a great line of traffic for trade and military expeditions is a problem which I cannot discuss here. But one important observation, and that of a topographical nature, may be recorded. It is, beyond question, possible to make the whole of the Lou-lan route practicable for cart traffic, a mode of transport for which the Chinese still retain a special preference and aptitude in Central-Asian regions and those adjoining them. It is referred to in some of the Chinese documents found at the Lou-lan Site,[9] and practical experience elsewhere makes me inclined to think that in its use may be found the chief clue for the solution of the problem.

[4] Cf. Wylie, *Journal of Anthrop. Inst.*, x. p. 26, and for the position of the 'White Dragon Mounds', as ascertained by me in 1914, *Geogr. Journal*, xlviii. p. 128; above, pp. 340 sq. The suggestion made in *Desert Cathay*, i. p. 525, must be corrected accordingly.

[5] See above, pp. 418 sq.; below, pp. 555 sq.

[6] See below, p. 555; chap. XIX. sec. i, ii.

[7] Cf. *Geogr. Journal*, xlviii. p. 129, for a reference to the traces of an ancient canal which I found along the northern edge of the Bēsh-toghrak valley and to the west of Kosh-kuduk (Map No. 70. B. 3).

[8] See *Geogr. Journal*, xlviii. pp. 127 sqq.

[9] See above, p. 412; Hedin, *Central Asia and Tibet*, ii. pp. 143 sq.

Southern branch route to Shan-shan.

The same remark applies also to the southern branch of the route leading to Mīrān and Abdal, which could be made practicable for rough carts with no great trouble. Here, too, the difficulty about water is very serious on the western section of the route, since over a marching distance of about 94 miles, between Abdal and Lowaza, no drinkable water is obtainable except when the ice of the salt springs can be used, between December and April. We shall see that this difficulty must have already existed when Marco Polo passed here. It is possible, though there is no direct evidence to prove it, that water was more plentiful in Han times, progress of desiccation being responsible for the springs west of Lowaza turning salt. But, in any case, there is good reason to believe that in historical times the physical obstacles on this southern branch of the route could never have been quite so formidable as on the northern or Lou-lan one, some modest grazing and fuel being still obtainable at every stage, as Marco Polo duly noted. Hence I consider it highly probable that this southern branch route, leading straight to the old Shan-shan sites of Mīrān and Charkhlik, was used in the earliest period of Chinese intercourse with the Tārīm Basin, even though I cannot trace direct evidence for its use during Han times.[10]

Route to Lou-lan described in *Wei lio.*

The northern route leading to Lou-lan must have remained the main line of communication from Tun-huang westwards during the first centuries after Christ. But when the Later Han Annals mention the route leading to Shan-shan, they do not give any detail regarding it except that it started from the barrier of *Yü-mên*, the 'Jade Gate'.[11] Fortunately we fare better in the case of the record which the *Wei lio*, composed between A.D. 239–65, furnishes regarding the three routes used from Tun-huang to the 'Western Countries' during the 'Epoch of the Three Kingdoms'. I have already had occasion, when dealing with the historical topography of the Lou-lan Site, to discuss the interesting information which this text supplies, and which M. Chavannes' translation and full commentary have rendered conveniently accessible.[12] I have quoted there the whole of the important passage, and shown that the 'central route' of the *Wei lio* is identical with our Lou-lan route, passing from the Jade Gate through the Bēsh-toghrak valley to the ancient Lop lake-bed, and across it to the extreme north-east end of the once habitable Lou-lan area. But it still remains for us to fix the location in detail of such intermediate stages as the text names, in the light of the knowledge now gained of the actual ground which the route crossed. For convenience of reference, I may quote again that portion of the passage which concerns us here: 'The central route is the one which, starting from *Yü-mên kuan*, sets out on the west, leaves the well of the Protector-General, turns back at the northern extremity of the *San-lung* ('Three Ridges') [desert of] sand, passes the *Chü-lu* granary; then, on leaving from the *Sha-hsi* well, turns to the north-west, passes through the *Lung-tui* ('Dragon Mounds'), arrives at the ancient Lou-lan.'

'Central route' of *Wei lio.*

Route starts from *Yü-mên.*

It must be a matter for regret that the record of the *Wei lio* does not give the distances between the localities named. But even without their guidance the references to bearings, and the exact knowledge we now possess of the starting and terminal points, fortunately help us to identify the places meant with considerable probability. The location of *Yü-mên*, the 'Jade Gate', at the ruined fort T. XIV of the ancient Limes (Map No. 74. D. 3), for which the excavations to be described below supplied conclusive archaeological evidence,[13] provides us with a sure point of departure. Of the 'well of the Protector-General' I shall have occasion to show below that it must, in all likelihood, be placed at the site by the extreme western end of the Limes wall, marked by the watch-towers T. IV. a, b.[14] A clear indication is next supplied in the statement that the route 'turns back

[10] For a possible allusion to it in the Former Han Annals, see above, p. 340.

[11] Cf. Chavannes, *Les pays d'occident*, *T'oung-pao*, 1907, pp. 169 sq.

[12] Cf. above, pp. 417 sqq.; Chavannes, *Les pays d'occident d'après le Wei lio*, *T'oung-pao*, 1905, pp. 528 sqq.

[13] See below, chap. XIX. sec. i, ii.

[14] See below, chap. XVII. sec. i. As M. Chavannes has

The 'Three Ridges' Sands.

at the northern extremity of the *San-lung* ('Three Ridges') [desert of] sand.' With the knowledge of the ground which my explorations have furnished, I feel assured that by this must be meant that part of the route which lies immediately to the east of Bēsh-toghrak and has been described above as the end of its second section. A reference to Maps No. 74 and 70 will show that the route, where it passes through the old terminal basin of the Su-lo Ho, in some places skirts round, and in others actually crosses, the northernmost off-shoots of the high range of dunes which flanks the Bēsh-toghrak valley all along on the south. This range represents, as it were, only the foot-hills of successive ranges of drift-sand which extend upwards to the great gravel glacis of the high Anambar-ula portion of the Āltin-tāgh (Map No. 75. A–D. 1) and further west find their continuation in the area of high dunes spoken of by the Lopliks as *Kum-tāgh* (the 'Sand Mountains'), south of the dried-up Lop lake-bed.[15]

Sand ridges E. of Bēsh-toghrak.

Looking at the general map, we see quite clearly that the northern extremity of this great desert is formed by the low sand ridges which jut out like promontories into the above-mentioned basin and are crossed by the route. There we can quite safely locate 'the northern extremity of the [desert of] sand of the Three Ridges'. This identification is further supported by the change of bearing which the *Wei lio's* account implies, where it says that the route 'turns back (*revient*)' at this point. As we follow the route on the map, we see plainly that, after leaving the western end of the Limes, it runs almost straight to the north-west until it crosses the dune promontory nearest to Bēsh-toghrak, whence it strikes a south-westerly course in conformity with the general direction of the Bēsh-toghrak valley.

Origin of local name *San-lung*.

The agreement between the wording of the text and the topographical configuration is so close that I am tempted to connect the name of *San-lung*, 'the Three Ridges', with the fact of the route actually crossing three distinct offshoots or promontories of the high sand ridge on the south. The maps show these plainly stretching across the line of route between Camp 153 (Map No. 74. A. 3) and the head of the Bēsh-toghrak Valley (No. 70. D. 3, 4). This feature of the ground must have impressed itself all the more upon the Chinese wayfarers of old because it is only at this point that real dunes have to be traversed on the Lou-lan route. The dunes of the three offshoots referred to did not appear to me to rise anywhere above 40 feet or so, and would certainly be practicable for Chinese cart traffic such as I have seen elsewhere. Yet I know only too well from experience how troublesome an obstacle they are bound to present to weary men and beasts engaged upon such a desert journey. Nor can we feel surprise at these curved-backed ridges of sand attracting the attention of the old travellers and finding a record in the local nomenclature. The graphic designation of the 'White Dragon Mounds', used for the salt-encrusted Mesa belts which form so forbidding a feature towards the western end of the Lou-lan route,[16] is sufficient to prove how observant of all peculiar topographical features were the eyes of the early Chinese wayfarers in these desolate wastes.

'Well of the Protector-General.'

With this point of the *Wei lio's* itinerary once determined, it is possible to fix upon probable locations also for the 'well of the Protector-General', which precedes it, and 'the *Chü-lu* granary', which follows it. In the former, I think, we can safely recognize the depression within the westernmost angle of the Limes wall, guarded by the watch-towers T. IV. a, b (Map No. 74. B. 3; also Plate 33), which, owing to plentiful grazing and to fresh water obtainable in springs and wells,

kindly pointed out to me, his translation, *T'oung-pao*, 1905, p. 529, of the name of this locality should read 'le puits du Protecteur *général*'.

[15] Reference to the general map will best illustrate the configuration of this big belt of drift sand, which extends along the foot of the Āltin-tāgh between 91° and 94° long. Dr. Hedin crossed it in February, 1901, from south to north along a line leading from Anambar (Khan-ambal of Map No. 75. B. 3) to a point in the dry terminal basin east of Bēsh-toghrak (his 'Toghrak-kuduk'); for a detailed account cf. Hedin, *Central Asia*, ii. pp. 86 sqq.

[16] Cf. above, p. 341; *Geogr. Journal*, xlviii. p. 128.

would offer a very convenient halting-place for caravans following the protected border line. My description of this locality further on will show that I found here traces of what seems to have been a large entrenched camp, probably dating back to the time when the route and the line of wall guarding it up to this point were first established.[17] It is certain that there is no place on the route between the Jade Gate (T. xiv) and Bēsh-toghrak which would offer similar advantages for a half-way halting-place.

The *Chü-lu* granary.

The '*Chü-lu* granary', which is likely to have been one of the early 'resting stations' established soon after the Lou-lan route was first opened, may with some probability be located at Bēsh-toghrak. There is no other site likely to have offered such advantages as this place, which nowadays, too, has more grazing than any other west of the Limes. Being just beyond a difficult stage of the route, Bēsh-toghrak would be particularly suited for an advanced base of supply. But I could trace no remains to give archaeological support to the identification, and considering the character of the ground, with subsoil water near the surface and a good deal of *shōr* in the soil, no structures of mud bricks or mere clay would have had much chance of leaving visible traces here after many centuries of abandonment. No one who, like myself, has seen the wretched mud hovels which serve as Chinese 'inns' and guards' quarters on the desert route from An-hsi to Hāmi, the modern pendant of the Lou-lan route, could feel any doubt about their complete disappearance in the course of a thousand years or even less after they were abandoned. And yet they somehow suffice for a traffic which at times may not be much less than that seen by the Lou-lan route in its heyday.

Position of *Sha-hsi* well.

As regards the position of *Sha-hsi* well, we are furnished with a very helpful indication by the statement that the route there turned to the north-west. This, read in the light which my explorations of 1914 have thrown upon the line followed by the ancient Lou-lan route, takes us clearly somewhere near the point where it turns the last south-western offshoot of the low Kuruk-tāgh range, overlooking the Bēsh-toghrak valley from the north. This point approximately corresponds to 91° 32′ long. 40° 23′ lat. in Map No. 67. From there the line of the ancient route, as I have traced it, makes a sharp turn to the north-west and follows this bearing, along the shore of the dried-up Lop sea, till it reaches the point where its salt-encrusted bed and the 'White Dragon Mounds' flanking it are traversed.[18] It was within about twelve miles to the north-east from this point that, when tracking in 1914 the line of the ancient route in the opposite direction, I came upon the first living vegetation at the foot of the clay cliffs lining the eastern inlet of the ancient sea-bed, north-west of Kum-kuduk.[19] Three miles or so further on we succeeded in digging a well on a strip of ground where the soil became sandy. Though the water proved too salt even for the camels, its presence suggests that in early times, when desiccation had not yet proceeded so far, a 'resting station' with drinkable water, corresponding to the 'Sha-hsi well' of the *Wei lio*, might have existed somewhere near this place at the western end of the Bēsh-toghrak valley.[20]

[17] Cf. below, chap. xvii. sec. i. The usual place where travellers halt at present is Toghrak-bulak, my Camp 154, on the bank of the Su-lo Ho, about three miles to the north-west. But here the grazing is very scanty, and, owing to the barren gravel soil of the adjoining plateaus, there could not have been enough of it in the days when much traffic passed along the route.

[18] Cf. *Third Journey of Exploration*, *Geogr. Journal*, xlviii. p. 129. The provisional sketch-map attached to that paper will help to illustrate the change of direction which the ancient route line makes from the above point north-west of Kum-kuduk.

The indication in Map No. 67. A. 2; B. 3 of a continuous chain of low hills running north-west from that point has proved erroneous. In reality the heights, sighted in 1907 from great distances, were found on closer survey to belong to the western ends of separate parallel ranges of the Kuruk-tāgh, where they drop down towards the eastern shore of the great dried-up sea basin.

[19] For a view of this ground by the ancient shore line, see Fig. 13 of my paper, *loc. cit.*

[20] Is it possible that a characteristic feature of the ground here suggested the designation *Sha-hsi* 沙 西 for this station? It may literally be interpreted to mean 'the west [end] of the

Abandonment of Lou-lan route.

It is not necessary for us to follow the *Wei lio's* account of the Lou-lan route further; for we have had occasion before fully to discuss and to locate its remaining stages, the *Lung-tui*, 'Dragon Mounds', identical with the 'White Dragon Mounds' of the Former Han Annals, and 'ancient Lou-lan', represented by the remains of the Lou-lan Site.[21] We have also seen how, within a century after the record of that itinerary, the tract of Lou-lan was finally abandoned to the desert. With the disappearance of water and cultivation there, the ancient Lou-lan route must have become impracticable for traffic within the first half of the fourth century A.D. Since it was opened by the great Han emperor Wu-ti for Chinese expansion westwards it had remained in use for about four hundred and fifty years. But with the opening of the easier route to the eastern T'ien-shan, which the *Wei lio* calls the 'new route of the north', and which probably led near Hāmi, at the beginning of the Christian era,[22] its importance must have considerably diminished. Even before it became finally closed, China's intercourse with the West had greatly declined, and its political hold on the Tārīm Basin become interrupted or altogether lost.

Accounts of Chinese pilgrims.

This prolonged eclipse of Chinese influence in Central Asia, which extended from the period of the Eastern Chin Dynasty (A.D. 317–419) to the advent of the T'angs in the early seventh century, is reflected by the total absence in the intervening dynastic records of accounts of the routes connecting China with the 'Western Regions'. Fortunately we have now the itineraries of Buddhist pilgrims from China to India helping to some extent to bridge the gap, and to one of the earliest known among them, Fa-hsien, we owe a graphic, if brief, description of the desert track from Tun-huang to Shan-shan or Lop. Though it has already been necessary to consider it in connexion with the history of the Lop region, I may conveniently again quote the passage here.[23]

Fa-hsien's desert crossing from Tun-huang.

Fa-hsien with a company of monks, fellow pilgrims, had reached Tun-huang in the autumn of A.D. 400. It is interesting to find the district described as 'the frontier territory of defence extending for about 80 li from east to west, and about 40 from north to south.' This shows that the area of cultivation in the main oasis could not then have been much in excess of what it was in recent times (see Map No. 78). It also suggests that the stations along the ancient Chinese border wall extending far to the west must have already been abandoned, a conclusion fully supported by the archaeological evidence of my explorations. After a stay of a little more than a month, Fa-hsien and four other monks started 'in the suite of an envoy'. The prefect of Tun-huang, a man of learning, 'had supplied them with the means of crossing the desert [before them], in which there are many evil demons and hot winds. [Travellers] who encounter them perish all to a man. There is not a bird to be seen in the air above, nor an animal on the ground below. Though you look round most earnestly where you can cross, you know not where to make your choice, the only mark and indication being the dry bones of the dead [left upon the sand]. After travelling for seventeen days, a distance, we may calculate, of about 1,500 li, [the pilgrims] reached the kingdom of Shan-shan.'

Fa-hsien's route to Charkhlik.

As the tract of ancient Lou-lan was by that time already abandoned, it appears to me quite clear that the pilgrims' route must have taken them towards Mīrān and Charkhlik. The description of it leaves no doubt that it led, not along the track high up in the Āltin-tāgh, but through the desert depression between Tun-huang and Lop. And there, as my preceding topographical account

sand'. The place mentioned in the text is certainly the last westwards to which the light drift-sand covering the bottom of the Bĕsh-toghrak valley extends. Beyond it no drift-sand is met with now on the ancient route until the vicinity of the Lou-lan Site is reached.

[21] See above, pp. 341 sq., 419 sqq.

[22] Cf. above, pp. 419 sq., and below, chap. XIX. sec. vi; Chavannes, *T'oung-pao*, 1905, p. 533, note 1.

[23] Cf. Legge, *Fâ-hien*, pp. 11 sq.; also above, pp. 323 sq. I have adapted the transcription of Chinese names to the Wade system.

shows, there could in historical times have existed no other route practicable for a large party than the existing caravan track from Tun-huang to Mīrān or Abdal. This conclusion agrees both with Fa-hsien's description of the conditions experienced by travellers and with the length that he gives for the journey. His seventeen days of travel correspond exactly to the seventeen marches in which I covered the ground from Abdal to the Tun-huang oasis, with two days of halt added. In the same way, his estimate of about 1,500 li approaches the distance of about 380 miles that I reckoned for the aggregate of the marches as closely as could possibly be expected, seeing that an equation of 4 or 5 li to the mile is the average which can safely be deduced from the records of Chinese pilgrims to India wherever it is possible to check their estimates of distance between definitely known localities.

Sung Yün, the next Buddhist pilgrim, as far as we know, to visit the Lop tract (A.D. 519), reached it, as we have seen above, not from Tun-huang but across the Koko-nōr region and Tsaidam.[24] The interesting report of P'ei Chü on the Western Countries, compiled in A.D. 607 from information collected at Kan-chou, mentions, indeed, Shan-shan or Lop as the first territory on the southern of the three roads westwards.[25] But it does not appear to indicate the route by which this was reached. We can, however, feel quite sure that it was the desert route from Mīrān to Tun-huang which was followed in the winter of A.D. 645 by Hsüan-tsang, the greatest of the Chinese Buddhist pilgrims, on his return from India to China. It is to be regretted that his own record in the *Hsi-yü-chi* stops short with his arrival in the territory of Na-fu-po, 'which is the same as the old Lou-lan country', and, as we have seen above, identical with Lop.[26]

P'ei Chü's record of southern route.

Hsüan-tsang evidently considered the ground covered by the remaining portion of his homeward journey as lying within the borders of the Chinese empire, which since he first set out in A.D. 630 for the 'Western Regions' had, under the emperor T'ai-tsung, vigorously commenced its fresh expansion westward, and therefore as outside the scope of his record. But from his *Life*, written by his disciples Hui-li and Yen-tsung, we know that Hsüan-tsang actually accomplished this final part of his travels by crossing the desert from Lop to Tun-huang or Sha-chou.[27] The letter from the Emperor T'ai-tsung which Hsüan-tsang received at Khotan in reply to his application for permission to return, and which is reproduced in the *Life*, distinctly states that the magistrates of Tun-huang had been instructed to conduct him 'through the desert of shifting sands'.

Hsüan-tsang's desert crossing.

That the route through the desert connecting Tun-huang with the Lop tract continued to be used during T'ang times is highly probable. But the itinerary of the *T'ang shu* from Tun-huang to Khotan, of which M. Chavannes kindly supplied me with a translation,[28] starts from the Yang barrier, and may therefore, in view of the explanations given further on,[28a] be assumed to refer to the route leading to Mīrān along the Āltin-tāgh. I regret that I have not access to the information probably to be gleaned from the newly recovered Chinese geographical texts dealing with the Tun-huang region which are to be found among the manuscripts from the Thousand Buddhas' Caves in my collection, and similarly also in that of M. Pelliot.[29]

Desert route to Tun-huang during T'ang times.

As has been pointed out above, the very existence of a Tibetan fortified post at the site of

[24] See above, p. 323.

[25] Cf. Richthofen, *China*, i. p. 530, note, giving extracts from Neumann, *Asiatische Studien*, 1837, pp. 187 sqq.

[26] See above, p. 321; Julien, *Mémoires*, ii. p. 247; Watters, *Yuan Chwang*, ii. p. 304.

[27] Cf. Julien, *Vie*, pp. 288, 290; Beal, *Life*, pp. 210, 212. It would be interesting to ascertain whether the 'conveyances' for which Hsüan-tsang at Na-fu-po exchanged the horses and camels supplied so far by the King of Khotan, and which he used for the journey to Tun-huang, were really carts, as the French translation seems to indicate.

[28] See Appendix *A*, II, (Extract from *T'ang shu*, chap. XLIII b).

[28a] See below, chap. XVI. sec. iv.

[29] Cf. for one of these texts Dr. L. Giles's paper, *Tun-huang Lu: Notes on the district of Tun-huang*, *J.R.A.S.*, 1914, pp. 703 sqq.; Pelliot, *J. Asiat.*, 1916, janvier-février, pp. 111 sqq.

Routes from Tun-huang to Lop after T'ang rule.

Mīrān proves that the importance of the routes leading from Tun-huang to the Lop region still continued after Chinese political influence in the Tārīm Basin had disappeared towards the close of the eighth century.[30] The numerous embassies from Khotan to the imperial court of China which are mentioned in the Annals from the accession of the Posterior Chin to the end of the Sung Dynasty (A.D. 936–1126), and to which I have already had occasion to refer,[31] make it appear highly probable that the direct routes between Lop and Tun-huang continued to be used, at least intermittently, after the final downfall of the T'angs. But only in one instance do we find the route specified, and in that it is the one leading along the high slopes of the Āltin-tāgh.[32]

Section III.—MARCO POLO AND LATER TRAVELLERS ON THE LOP DESERT ROUTE

Marco Polo's passage to *Sachiu.*

We must let another century and a half pass by before we meet with a distinct record of the use of the desert route. We owe it to Marco Polo's passage about A.D. 1273 from the 'town of Lop' to the 'City of Sachiu', and there is much in his graphic description of the route to claim our special interest. We have already followed the great Venetian traveller to the 'town of Lop' and have shown that it must be located at the present Charkhlik.[1] This is what his immortal book tells us of the journey through the desert:[2] 'Now, such persons as propose to cross the Desert take a week's rest in this town to refresh themselves and their cattle; and then they make ready for the journey, taking with them a month's supply for man and beast. On quitting this City they enter the Desert.

Description of desert route.

'The length of this Desert is so great that 'tis said it would take a year and more to ride from one end of it to the other. And here, where its breadth is least, it takes a month to cross it. 'Tis all composed of hills and valleys of sand, and not a thing to eat is to be found on it. But after riding for a day and a night you find fresh water, enough mayhap for some 50 or 100 persons with their beasts, but not for more. And all across the Desert you will find water in like manner, that is to say, in some 28 places altogether you will find good water, but in no great quantity; and in four places also you will find brackish water.

M. Polo on spirits of deserts.

'Beasts there are none; for there is nought for them to eat. But there is a marvellous thing related of this Desert, which is that when travellers are on the move by night, and one of them chances to lag behind or fall asleep or the like, when he tries to gain his company again he will hear spirits talking, and will suppose them to be his comrades. Sometimes the spirits will call him by name; and thus shall a traveller ofttimes be led astray so that he never finds his party. And in this way many have perished. [Sometimes the stray travellers will hear as it were the tramp and hum of a great cavalcade of people away from the real line of road, and taking this to be their own company they will follow the sound; and when day breaks they find that a cheat has been put on them and that they are in an ill plight.] Even in the daytime one hears those spirits talking. And sometimes you shall hear the sound of a variety of musical instruments, and still more commonly the sound of drums. [Hence in making this journey 'tis customary for travellers to keep close together. All the animals, too, have bells at their necks, so that they cannot easily get astray. And at sleeping-time a signal is put up to show the direction of the next march.] So thus it is that the Desert is crossed.'

[30] Cf. above, p. 475.
[31] See above, p. 320.
[32] Cf. Rémusat, *Ville de Khotan*, pp. 74 sqq.; *Ancient Khotan*, i. p. 178.
[1] See above, pp. 318 sq.
[2] Cf. Yule, *Marco Polo*, i. pp. 196 sqq.

Marco Polo at the beginning of the next chapter follows up this description by the statement: 'After you have travelled thirty days through the Desert, as I have described, you come to a city called SACHIU, lying between north-east and east; it belongs to the Great Kaan, and is in a province called TANGUT.'[3]

Modern traders' journeys.

It will be easier to demonstrate the remarkably close agreement between Marco Polo's account of his journey through the 'Desert of Lop' and the route we have described above, if we examine first the matter-of-fact details which the opening portion of his chapter records. During my first stay at Charkhlik in December, 1906, when collecting information about the Tun-huang route, I ascertained that traders from Khotan and Keriya who are accustomed to follow it ordinarily reckon the journey to take a whole month with fully-laden animals. In the course of this they adhere to the practice, imposed by due regard for their camels or donkeys—these alone can be used for loads—, of making rather short daily stages along those portions of the route where, as between Kum-kuduk and Bēsh-toghrak (Maps Nos. 67, 70) and my Camps 155 and 176 (Maps Nos. 74, 78), water and grazing of some sort can be secured at no long intervals. Or else, if the condition of their animals would make this preferable, they will halt for a couple of days in a suitable place and then double short stages. Our subsequent journey fully confirmed the correctness of the traders' usual estimate, and with equal clearness proved the substantial accuracy of the statements recorded by Marco Polo.

Estimate of one month's travel.

Including the marches from Charkhlik to Mīrān (whence Donglik is about as distant as from Abdal), our plane-table survey, as finally checked and revised, showed a distance of about 397 miles from Charkhlik, Marco Polo's 'town of Lop', to his 'city called Sachiu', i.e. Sha-chou or Tun-huang. If we allow thirty days for the whole journey, as Marco Polo does at the beginning of his next chapter, the average for a day's march on the basis of this reckoning works out at 13 miles. Considering the trying nature of the ground over considerable portions of the route, this daily average must appear very reasonable to any one familiar with camel traffic in this region of Central Asia. It is true that by special exertions, amounting practically to a succession of forced marches, we managed to cover the distance from Abdal to Tun-huang town in nineteen days, including two days of halt, to which three days would ordinarily have to be added for the journey from Charkhlik. But I had taken special care to allow our own animals some six weeks' preparatory rest and to lighten loads as much as possible by the use of additional donkey transport. Even thus, some of the donkeys broke down, and I much doubt whether any large caravan could do the journey in less than a month without risking a disaster from serious loss of animals.[4]

Physical conditions described.

A reference to the brief account given above of the first two sections of the route, and to the ampler details contained in Chapters XLV–XLVIII of *Desert Cathay*, will suffice to prove how correctly Marco Polo describes the physical conditions actually met with on this desert route as regards water, grazing, and other features likely to impress a traveller. In the 'hills and valleys of sand' we easily recognize the impression left by the huge ridges of dunes which the route closely skirts along the whole length of its second section. Experience showed that the number of stages where water was either unobtainable or too salt for drinking was four, exactly corresponding to that of the places of which Ser Marco notes that 'you will find brackish water'.[5] In the same way, his

[3] Cf. Yule, *Marco Polo*, i. p. 203.

[4] This risk is well illustrated by the experiences with which Col. Bruce's party met on its journey to Tun-huang in the winter of 1906; cf. Bruce, *In the Footsteps of Marco Polo*, pp. 182 sqq.

[5] We found three of these stages between Abdal and Lowaza (Camps 142–144, Map No. 61), the fourth at our Camp 153 (Map No. 74). At the last-named camp, and probably also near our Camp 143 (Map No. 61. B. 2), water might be reached even now by well-sinking; but it would be found very brackish. Of course, the possibility must be kept in view that desiccation or some other process has effected changes in such details of the subsoil drainage, and that Marco Polo's four stages with brackish water may have to be located at other points.

warning as to the limitation of the water-supply available elsewhere proved well founded at the great majority of the remaining stages. In view of what I have said above as to the number of stages, there is nothing to urge against Marco's estimate that 'in some 28 places altogether you will find good water'—provided that the term 'good' is not taken too literally!

M. Polo followed present route.

The adequate knowledge now gained of the main topographical features of the area intervening between the southern portion of the Lop tract and Tun-huang makes it perfectly certain that, in historical times, the direct desert route practicable for caravans passing between the two districts could have followed no other line but the one still used. Not only is this the shortest route leading to the terminal course of the Su-lo Ho, but it is also clear that neither in the salt-encrusted waste of the dried-up Lop sea-bed to the north, nor among the high sand ridges of the Kum-tāgh in the south, could a succession of stages with water and some grazing, such as Marco Polo's description implies, be supposed to exist. This plain topographical fact once established, it is needless for us to consider conjectural explanations proposed as to 'why Marco Polo never mentioned the Lop-nōr', a question by which it was sought to link up the old traveller's account with the long-drawn discussion of 'the Lop-nōr problem'.[6] Wonderful observer as he was of things which lay within 'the sphere of his interests', Ser Marco was not a geographer in the modern sense. His silence as to the marshes which he might have sighted in the distance from Donglik, and about the bare salt waste which he must have approached much closer later on, is scarcely more surprising than the total want of any reference on his part to the huge rampart of the snowy K'un-lun, the nearness of which he could not have failed to notice on his long journey from Yārkand to Charkhlik.

M. Polo's silence on Lop-nōr.

Extent of 'Gobi'.

There is no need either for us to discuss in detail what Marco states as to 'the length of this Desert' being 'so great that 'tis said it would take a year or more to ride from one end of it to the other'. We note that he is careful enough to qualify this estimate as related by others, and can realize without difficulty that his informants, Mongols or Turks as they are likely to have been, had in their mind the whole of the huge belt of ground without permanent agricultural settlements which extends right across from north-eastern Mongolia to western Tibet, just as modern Chinese would apply the term 'Gobi' (Ko Pi) in its widest sense.[7] The same remark applies also to what he tells us further on about the dangers of the desert crossing.

Evil spirits haunting desert.

It did not need my journey along his actual route, nor my daily contact with men still cherishing notions much like those of his Central-Asian fellow-travellers, to convince me that in his record of 'a marvellous thing related of this Desert' we have but a faithful reflex of old folk-lore beliefs that he must have heard on the spot. Sir Henry Yule has shown long ago in his comments on this passage that the dread of being led astray by evil spirits haunted the imagination of all early travellers who crossed the desert wastes between China and the oases westwards.[8] Fa-hsien's statement, quoted above, clearly alludes to this belief, and Hsüan-tsang distinctly attests it where he paints in graphic words the impressions left by his journey through the sands of the Taklamakān between Niya and Charchan.[9]

Ma Tuan-lin's notice of desert route.

Striking testimony to the prevalence and antiquity of this dread felt by travellers passing through the 'Desert of Lop' is given by a passage in Ma Tuan-lin's great compilation which describes the shortest route from China towards Kara-shahr, and which reads almost like a translation from Ser Marco's book. It must have been extracted from some earlier Chinese historical source, but I am unable at present to ascertain which it was. In any case, as it obviously refers

[6] Cf. the long note in the third edition of Yule, *Marco Polo*, i. pp. 199, with the reference there given to *Geogr. Journal*, June 1898, pp. 657 sq.

[7] See regarding the use of this general term for desert, Richthofen, *China*, i. p. 24, note 2.

[8] Cf. Yule, *Marco Polo*, i. pp. 201 sq.

[9] Cf. Julien, *Mémoires*, ii. p. 246; Watters, *Yuan Chwang*, ii. pp. 303 sq.; *Ancient Khotan*, i. p. 435.

either to the present track from Tun-huang to Lop or to the ancient Lou-lan route, it is worth quoting here in full as reproduced by Sir Henry Yule on the basis of Visdelou's translation.[10] 'The Chinese historian Ma Twan-lin informs us that there were two roads from China into the Uighúr country (towards Karashahr). The longest but easiest road was by Kamul. The other was much shorter, and apparently corresponded, as far as Lop, to that described in this chapter. "By this you have to cross a plain of sand, extending for more than 100 leagues. You see nothing in any direction but the sky and the sands, without the slightest trace of a road; and travellers find nothing to guide them but the bones of men and beasts and the droppings of camels. During the passage of this wilderness you hear sounds, sometimes of singing, sometimes of wailing; and it has often happened that travellers, going aside to see what those sounds might be, have strayed from their course and been entirely lost; for they were voices of spirits and goblins. 'Tis for these reasons that travellers and merchants often prefer the much longer route by Kamul."'

Desert route safe from raids.

The concluding remark of Ma Tuan-lin's extract has an interest of its own. It appropriately directs our attention to the reason which has at all times induced Chinese traffic to prefer the longer northern route, through Hāmi or Kumul and by the foot of the T'ien-shan, to the route through the Lop desert—if only the former could be followed in safety. There are fundamental features in the nation's character and policy which have always made the Chinese far more willing to encounter and overcome the difficulties of nature than to face the risks arising from human foes. It is to this deep-rooted preference that we must attribute in the main the first opening of the Lou-lan route, notwithstanding the formidable natural obstacles it must have presented even in ancient times, and its continued use for centuries. Though the relative shortness of this route was also, no doubt, duly appreciated, the real explanation lies in the fact that, as we shall see further on, it afforded practical immunity from the raids of the Huns and their immediate nomadic successors in the regions north of the T'ien-shan. Except during the short intervals of complete Chinese predominance, these raids were always a serious source of danger on the far easier route leading along the foot of the range.

Route used by Shāh Rukh's embassy.

We can scarcely hope to ascertain the exact reasons which determined Marco Polo and his uncles to choose the route via Khotan and Lop for their journey to Cathay instead of the easier one in the north. In the heyday of Mongol dominion the protection of the 'Great Kaan' assured safety for travellers on all the main roads of Central-Asian trade. But it is certain that we owe our next western notice of the Lop desert route, which is of a date nearly one and a half centuries later, directly to the insecurity of the northern road. When, in A.D. 1420, the embassy dispatched by Shāh Rukh, the Mongol prince of Herāt, to the imperial court of China was proceeding from Samarkand to the frontier of China proper near Su-chou, it followed the road via Turfān and Su-chou.[11] But when the mission on its way back from Peking left Su-chou again in January, 1422, homeward bound, 'the troubles in Mongolia induced the ambassadors now to take the unfrequented southern route through the desert', or as Quatremère's translation of the original puts it:[12] 'La crainte de l'ennemi les décida à préférer la route du désert; le dix-huitième jour de rebi-awal, ils franchirent, avec de grandes fatigues, ces chemins non-frayés et dépourvus d'eau; le neuvième jour de djoumada second, ils arrivèrent à la ville de Khoten.'

[10] See Yule, *Marco Polo*, i. p. 201 quoting Visdelou's *Supplement* to D'Herbelot's *Bibliothèque Orientale* (1780), p. 139.

[11] Cf. Sir Henry Yule's abstract of Quatremère's translation of the mission's Persian record, Yule, *Cathay*², i. pp. 271 sq.

[12] See *ibid.*, i. pp. 286 sq. Rehatsek's version (*Indian Antiquary*, 1873, p. 83) quoted in M. Cordier's note reads: 'they left Qayl [i.e. the frontier station, *Karaul*, near Su-chou, corresponding to the present Chia-yü kuan] and selected the road through Chul [i.e. *chöl*, the Turkī term for desert] on account of the insecurity of the highways, and arrived after much trouble on the 9th of Jomády the first (May 1st) in the town of Khotán.'

Desert route unknown to Mīrzā Ḥaidar.

This record is the last which I can trace, in the Western sources at present accessible to me, of the use of the Lop desert route until quite recent times. The fact that Mīrzā Ḥaidar's *Ta'rīkh-i Rashīdī* does not mention it may, in view of the author's thorough familiarity with the Khotan region, be safely assumed to show that such scanty trade as continued in his time to pass from the Tārīm Basin into China found its way there by the road through the northern oases. We have direct proof of this in the century following; for when in A. D. 1605 Benedict Goës set out from Yārkand for 'Cathay' with one of the rare caravans which still went there, after intervals sometimes longer than a year, he had to go to Su-chou by the route leading, just as the present Chinese high road does, through Ak-su, Turfān, Hāmi.[13] The fact is all the more significant as Goës himself had before visited Khotan and secured there the jade which, as he explicitly states, formed the general trade investment for those rare caravans seeking admission within the 'Chinese wall' of once more secluded China. It is obvious that the direct and much shorter route from Khotan to Su-chou through Lop must by that time have completely dropped out of use for trade purposes.

Goës follows Hāmi route.

Desert route forsaken by traffic.

It is difficult to believe that all knowledge of the short cut through the desert to Tun-huang could ever have completely disappeared among the hardy hunters and herdsmen, the ancestors or predecessors of the Lopliks, who lived their nomadic life on the lowermost Tārīm. Nor did the existence of such a route escape the attention of the Chinese administrators who immediately after the conquest of Eastern Turkestān under the great Emperor Ch'ien-lung, about the middle of the eighteenth century, set about to secure systematic knowledge of the topography and resources of the 'New Dominion' (Hsin-chiang).[14] A line of route evidently corresponding, in part at least, to the Lop desert route appears, in fact, in the Chinese cartographical presentation of the Lop-nōr region which has been reproduced by Dr. Wegener and Herr Himly from the 'Wu-chang-fu map', and which has been used, extensively if not always critically, in the multifarious controversy about the 'Lop-nōr problem'.[15] But the only references to it that I can trace in the Chinese geographical descriptions of the 'New Dominion' accessible to me are extremely brief, and confirm the impression derived from other indications that Chinese knowledge of the whole Lop region in the period between Ch'ien-lung's conquest and the Muhammadan rebellion in 1863 was very limited and hazy.[16]

[13] Cf. Yule, *Cathay*², iv. pp. 218 sqq.

[14] Regarding the surveys effected by the Jesuit Fathers under imperial orders, cf. Richthofen, *China*, i. p. 690. Much geographical information then collected in the newly conquered territories is to be found in the *Hsi yü wen kian lu*, published A.D. 1778, from which extracts first became accessible in Timkowski's *Voyage à Peking*. A passage quoted by Ritter, *Asien*, v. p. 329, from the translation of this text refers to the hydrography of the region east of Lop and, vague as it is, implies that the Chinese then knew of the existence of routes through it. It also shows a fair knowledge of the economic conditions prevailing among the contemporary Lopliks.

[15] See Wegener and Himly, *Nord-Tibet und Lob-nor Gebiet, Zeitschr. der Gesells. für Erdkunde*, Berlin, 1893, xxviii; also reproduced in Hedin, *Central Asia*, ii. p. 282. It would serve no useful purpose here to investigate how far the local names which this map shows along the route, and which may have been compiled from very varying sources, can be brought into relation with the actual topography of the route. For some remarks of Himly on these names cf. Hedin, *Reisen in Z.-A.*, p. 145, note 2.

[16] The *Hsi yü shui tao chi*, a geographical work published in 1823, states in connexion with a very summary account of the Lop tract, then paying tribute to the commander of Turfān: 'Eastwards one reaches Tun-huang and Su-chou. The new description of the dominion says: "From the Khara-nōr in the territory of Sha-chou one may go straight westwards and reach the Lop-nōr by a small track; the journey need not last a month"'; then follow quotations from the Han Annals, etc.; cf. Himly's extract in Hedin, *Reisen in Z.-A.*, p. 154. The same text (quoted by Himly, *ibid.*, p. 145, note 2) discussing the Khara-nōr, through which the Su-lo Ho passes north-west of Tun-huang, mentions that the lake is connected westwards with Lop-nōr by two routes, one southern, one northern.

M. Cordier in his note on Yule, *Marco Polo*, i. p. 206, quotes the following from Palladius, *Journal, N. China Branch, R.A.S.*, N.S., x. (1875), p. 5: 'In 1820, or about that time, an attempt was made to re-establish the ancient direct way between Sha-chow and Khotan. With this object in view, an exploring party of ten men was sent from Khotan towards Sha-chow; this party wandered in the desert over a month, and found neither dwellings nor roads, but pastures and water everywhere.' No doubt, in the original Chinese

Loplik tradition about route.

The desert track was certainly not used then by traders, and there was nothing to attract them to Lop, since, owing to the absence of any agricultural settlements westwards to Keriya, the route along the southern edge of the Taklamakān was equally deserted by traffic during the early part of the last century. Yet, from the information which my guide Mullah Shāh and other old Lopliks supplied, I gathered that during pre-rebellion times Chinese camel-men from Tun-huang used occasionally to come by the desert route in the winter to bring away the loads of dried fish which the Lopliks could provide in abundance for barter against iron and the like.

Desert route rediscovered.

But even this occasional traffic ceased early in the sixties, when all intercourse with China was broken by the establishment of Yākūb Bēg's Muhammadan kingdom in the Tārīm Basin and through the Tungan rebels' devastations in Kan-su. Thus the old caravan track came to be wholly forgotten, except in tradition and Chinese historical record. When, about 1891, the re-established Chinese administration became anxious, for strategic and commercial reasons, to develop the southern oases and to open up the nearest connexion with China, the line followed by the ancient route had to be rediscovered. Mullah Shāh himself, my quaint, honest companion to Lou-lan, and another Loplik hunter, both familiar with the westernmost portions of the Kum-tāgh desert from expeditions after wild camels, were then chiefly instrumental in reopening the route.

Chinese inscription at Donglik.

Engaged by a Chinese official, whom the Fu-t'ai, or Governor General, of Hsin-chiang had commissioned to explore and report, they succeeded, after a first expedition had failed, in guiding him and some Chinese sent from Tun-huang safely through to the terminal Su-lo Ho marshes. It was this plucky exploit which I had found duly recorded in a Chinese inscription on a wooden stêlê which had been set up near our camping place at Donglik, as related in my Personal Narrative.[17] The date, there stated as the seventeenth year of Kuang Hsü, accurately coincided with the account I had heard from Mullah Shāh nearly three months earlier. According to the story of this reliable witness, the chief difficulties in tracing the route had been encountered on the marshy ground towards Achchik-kuduk, and again among the Mesas and dunes of the deceptive basin beyond Bēsh-toghrak.

Journey of J. Martin.

Within two years of its rediscovery the ancient desert route was followed from Tun-huang by the ill-fated French traveller M. Joseph Martin, who subsequently died at Marghilān on his way homewards. He was the first European since Marco Polo known to have crossed the Lop desert. But he left no account of it beyond the few notes which M. Grenard was able to record from his mouth on his passage through Khotan.[18]

Col. Kozloff's survey of route.

The first mapping of the route followed soon; for at the beginning of 1894 Captain (now Colonel) P. K. Kozloff, as a member of the late Captain V. I. Roborovsky's Central-Asian expedition, travelled from Abdal to Tun-huang and secured a route survey by the plane-table. This has been recorded in the Russian Asiatic Trans-frontier Map XXI, and for its final portion also on the larger scale of 1 : 840,000 in the map that illustrates the topographical results of that important expedition in the Tun-huang region and in the high mountains south of it.[19] The special merit of Colonel Kozloff's survey lies in the fact that it first revealed the great eastward extension of the ancient dried-up Lop sea-bed, just as he was the first European to realize the existence of the ancient river-bed, the Kuruk-daryā, which once carried the waters of the Konche-daryā to Lou-lan and the north-western part of that huge basin. His mapping considerably

record on which the extract is based, the latter statement referred to the possible halting stages only.

[17] See *Desert Cathay*, i. p. 504.

[18] Cf. Grenard, *Mission D. de Rhins*, i. p. 46. The 'twelve days of desert, sandy only during the first two days, stony afterwards' (quoted in Yule, *Marco Polo*, i. p. 203 by M. Cordier), are evidently reckoned from the end of our second section, down to which M. Martin's Chinese companions are likely to have known the ground as visited by woodcutters and graziers from Tun-huang. Even thus the description is not quite correct.

[19] See *Report on the Imperial Russian Geographical Society's Central-Asian Expedition*, 1893–95, by Captain V. I. Roborovsky (Russian), vol. iii (Maps), 1899. Colonel Kozloff's journey took twenty-three days, including two halts.

facilitated my journey to Tun-huang and, subsequently, in the mountains beyond, even though, being confined to the actual line of route, it gave no indication either of the true terminal course of the Su-lo Ho or of the abundant remains of the ancient Chinese Limes to be found along its eastern section.

Revival of traffic on desert route.

In 1899 M. C.-E. Bonin, of the French Diplomatic Service, made an attempt, to be referred to again presently, to follow the route through from Tun-huang. It did not succeed beyond the first few marches, but enabled him correctly to recognize the character and importance of the remains last mentioned. In the winter of 1905–6 Colonel Bruce, accompanied by Captain Layard and Surveyor Lāl Singh, followed the route right through from Abdal to Tun-huang, and made a record of his party's trying experiences on this desert crossing.[20] Finally, starting a couple of weeks after them, Professor E. Huntington proceeded by the same track as far as Kōshe-langza, and thence made that plucky and memorable march northward which carried him right across the great crumpled-up salt waste of the ancient Lop sea to the foot of the Kuruk-tāgh, and which was rewarded by plenty of important geographical observations.[21] I have already had occasion elsewhere to record the steadily increasing use which, as I found in 1907, was being made of the old Lop–Tun-huang route for commercial traffic between Kan-su and Khotan,[22] and I may add here that the experience of my journey in 1914 showed this revival of the old trade route still continuing.

Section IV.—FIRST REMAINS OF THE OLD CHINESE LIMES

Third section of route to Tun-huang.

From this review of the historical notices of the old Lop desert route I may now return to an account of the journey which brought me over its third and remaining section to the oasis of Tun-huang and Sha-chou. My account may be brief; for subsequent archaeological explorations brought me back to this section for more than five weeks' work, and the record of them will also be the best place for discussing the topography of the ground. My first rapid passage did not allow adequate time to examine it in any detail. Most of the topographical features shown by Maps Nos. 74, 78 along this section of the route were, in fact, not mapped until that later occasion.[1]

M. Bonin's notice of ruins.

The flat gravel expanse to which, on March 7, the first few miles of our march beyond the ancient terminal basin had brought us (Map No. 74. A. 3) revealed none of those interesting details of the ground, and progress over it for close on ten miles was both easy and strangely monotonous. But there were expectations of archaeological discovery to keep me fully alert from the start on this new section of the route. From the brief account which M. C.-E. Bonin had published of a journey made right across China,[2] I knew that, after reaching Tun-huang in the autumn of 1899, he had attempted to follow the route through the desert to Lop. Owing to the want of reliable guides, or the reluctance of his Chinese escort to proceed further, he had been obliged to turn back to Tun-huang and travel by the mountain route, apparently after having reached the first marshes west of the Khara-nōr. In the course of this unsuccessful attempt he had passed ruined watch-towers, which recalled to him the *P'ao-t'ais* seen along the imperial highway in Kan-su, and also correctly observed some remains of a wall running near them. The distinguished French traveller had shrewdly guessed the probable antiquity of these ruins and even their historical

[20] Cf. Bruce, *In the Footsteps of Marco Polo*, pp. 173 sqq.

[21] See Huntington, *Pulse of Asia*, pp. 248 sqq.

[22] Cf. *Desert Cathay*, i. pp. 345, 351; ii. p. 99. It may be noted here as a point of quasi-historical interest that caravans to and from Khotan, owned by Pathān traders from the Indian N.W. Frontier, are accustomed to follow the desert route regularly each winter.

[1] The results of these surveys along the ancient Chinese Limes are shown in fuller detail by the Map in Pl. 33 on the scale of 3 miles to 1 inch.

[2] Cf. Bonin, *Voyage de Pékin au Turkestan Russe*, in *La Géographie*, 1901, p. 173.

importance, as indicating the line of 'the great route, vainly sought after till now, which, under the Han dynasty, ran to China through Bactria, Pamir, Eastern Turkestan, the Desert of Gobi, and Kan Suh'.[3] But his passing notice could not help me, in the absence of any map or sketch of route, to locate the remains beforehand.[4] Fortunately I had been able to inquire about them, before leaving Abdal, from Mullah, the true pioneer of the reopened route, and the information recorded from the mouth of my observant old guide gave me hope that I might come across the first 'P'ao-t'ais' on this march to the spring of Toghrak-bulak.

First ruined watch-tower.

This hope proved well founded. The first tower-like mound (T. II in Plate 33) lay too far off to the north to be noticed until we had passed by it. But in the second mound, T. I, approached after another couple of miles, I could easily recognize an unmistakable and relatively well-preserved watch-tower. About its antiquity I felt no doubt when I found the familiar layers of tamarisk branches inserted at regular intervals between the courses of stamped clay.

Old river-bed below tower T. I.

The tower rose in an easily defended position, flanked by small, steeply eroded Nullahs, on the very edge of the gravel plateau where it fell off with precipitous banks to a winding depression. This was fully a mile wide here and contained what was an unmistakable old river-bed, running to the north-west in the direction of the Wādi through which the route had emerged from the dry terminal basin. An extensive reed-covered belt stretching along the bottom and a string of salt-encrusted pools, then dry but still holding moisture beneath their surface, showed that water at times must make its way into this old channel. Its bottom lay fully eighty feet or so below the level of the gravel 'Sai'. Close to the west side of the tower were the foundations of a small and badly-decayed structure which, as I thought, might have been the watchmen's quarters. Small fragments of iron, apparently from implements, and of carved wood, together with a piece of some stout woollen fabric, were found on the slope below and confirmed this conjecture. This first relic of human activity in the desert was enough to raise cheering thoughts of fresh archaeological work before me. But for closer search there was no time then, and it was in darkness that I hastened after my caravan along the track, now luckily well marked in the gravel.

Su-lo Ho bed at Toghrak-bulak.

The camping ground of Toghrak-bulak was reached about three miles further on. It proved to be situated in a narrow, sharply scarped valley where reeds and scrub grew plentifully by the side of a hard-frozen marshy streamlet. This seemed to be spring-fed, as the name Toghrak-bulak, used by our Loplik guide, suggested, and further evidence was given by the presence of Toghraks, some dead, some further north still alive. But there was nothing to make me realize at the time, even in the light of the morning, that this was the bed of a live river which within less than six weeks would become almost impassable.[5]

Tower T. III sighted.

In my eagerness to get at more ruins, I secured an early start on the morning of March 8. Proceeding by the caravan track eastwards across an absolutely barren plateau of gravel, we had covered about three miles when, on a low ridge to the south-east and apparently not far off, I noticed rising what looked like a small ruin. It was the one now marked T. III in Map No. 74. B. 3 and Plate 33. So, sending the caravan ahead to the springs where our next camp was to be, I approached it with Chiang Ssŭ-yeh and a few of the men provided with Ketmans. The distance

[3] Cf. Bonin, *loc. cit.*, as quoted by M. Cordier in Yule, *Marco Polo*, i. p. 203.

[4] Nor are any indications of these ruins to be found in the maps showing the surveys of Captain Roborovsky's expedition.

[5] As evidence of the very deceptive nature of this ground it may be mentioned that the map attached to Captain Roborovsky's Report shows at Toghrak-bulak a small stream losing itself apparently in a depression on the north. Further to the east, detached marshes are shown by the map in places. But of the existence of the true terminal bed of the Su-lo Ho, which flows out of the Khara-nōr and, connecting those marshes, continues its course for about seventy miles further west than previously assumed, no indication could be found in that expedition's surveys.

proved greater than estimated; for what had seemed a flat level expanse of 'Sai' was found to be broken by a broad sandy depression containing luxuriant tamarisk scrub and plenty of dead Toghraks. Wheel-marks, the first seen since leaving Khotan, showed that Chinese from the Tun-huang oasis were apparently coming so far in search of timber. At last, ascending a steep scarp of about a hundred feet to the edge of the gravel plateau that skirted the depression along the south, I found myself at the ruin (Fig. 149).

Construction of watch-tower T. III.

It proved to be a solid square tower (see plan in Plate 36) with the faces receding towards the top, which still rose to a height of about 20 feet. At the base it measured 16–17 feet square. The solid masonry consisted of carefully set courses of hard sun-dried bricks, measuring, as at the first noticed tower, T. I, 14 by 7 inches, with a thickness of 5 inches. At regular intervals, each comprising three courses, thin layers of reeds were inserted between the masonry to give increased cohesion. The ruined watch-tower, for only as such could it have been intended, had suffered little damage in its brickwork, and even that was confined mainly to its northern face. On the south, the side least exposed to the winds which, as experience showed us, sweep this bleak expanse for the greater part of the year, the plaster covering of the brickwork still survived in places. There, too, were found some scanty traces of a broken wall adjoining. Apart from these, there was no indication of any structural remains except the solid tower itself, nor were any brought to light by a subsequent clearing of the ground, which spread its uniformly flat gravel surface all round, and here and elsewhere showed practically no trace of wind erosion.

Discovery of line of wall.

But as I was carefully examining the neighbouring ground, my attention was soon attracted by a straight line of bundles of reeds, with their ends cropping out from under a slight swelling of the gravel soil, about twenty yards north of the tower and close to the edge of the plateau. I traced this line eastward without much difficulty to the top of a small knoll near by. Arrived there, I could see the line stretching away perfectly straight towards another tower (T. VII) visible some three miles to the east, and assuming the form of an unmistakable wall where it descended rather steeply on the gravel slope to a lower terrace of the plateau and then to the depression already mentioned. It was clearly part of that early 'Chinese wall' for which M. Bonin's observation further east had made me look out, and a little digging on the low knoll, shown by Fig. 149 in the foreground, soon proved that I actually stood on remains of it. By clearing away the gravel and fine drift-sand which had accumulated below on the side sloping towards the depression northward, there was revealed a regular wall or *agger* constructed in a fashion which at first sight seemed strange indeed, but with which I was soon to become very familiar.

Reed fascines used in *agger*.

Here the wall had been built with alternate layers of bundles or fascines of reeds and of clay mixed with gravel. The former layers were 2 to 4 inches, and the latter 6 to 7 inches, in thickness. The bundles of reeds were placed horizontally and always at right angles to the direction of the wall. Their length was quite uniform and close upon seven feet. Their original thickness was here difficult to determine, as the accumulated weight of the successive layers had greatly compressed, and in fact almost solidified, the fascines. Yet each individual reed still retained full flexibility and, apart from the salt permeating the fibres, showed no obvious mark of great age. On the outside there was a revetment consisting wholly of fascines of reeds, fixed in the direction of the wall, and hence at right angles to the packed bundles within it. These fascines, which from their position could be detached and examined more easily, were found to show the same uniform length of seven feet, with an original thickness up to about eight inches. They were bound with bark twists at intervals of about six inches, and appeared to have been 'anchored' by means of ropes of tamarisk twigs passing right through the thickness of the wall.

The preservation of these facing, or revetting, fascines was obviously due to the protection

afforded by the sand and gravel which had accumulated along the foot of the wall. Higher up, where this protecting cover was thinning out towards the surface, they had been completely eroded by the wind. The intervening layers of clay and gravel, originally, no doubt, excavated from the adjoining soil, had acquired a remarkable consistency, resembling that of cement and due largely, as subsequent examination showed, to the binding effect of salt. Yet the actual height of the wall, where our experimental digging first uncovered it, was only about five feet. Much of the loose gravel and coarse sand found heaped up along this remnant may have originally been contained in the higher parts of the wall which had completely decayed.

Wall affected by wind-erosion.

There was little time then available to investigate the constructive details of this strange wall, and still less methodically to search for a clue to its date and origin. But through a lucky chance even this first scraping produced finds of manifest antiquity. Within the bundles of reeds, at the point where the wall had been partially exposed, there turned up fragments of fabrics (T. III. i. 001. b) in gay-coloured silk and a rag of a stout white fabric in hemp, such as found at the Lou-lan sites; remains of iron implements, including what probably were shafts of cross-bow arrows (T. III. i. 001. a, 002–004); the end of a wooden bar (T. III. i. 005); a birch of Toghrak twigs, etc. But far more welcome was a small piece of wood, about four inches long and mortised at the back. On the obverse were five Chinese characters, perfectly legible in spite of the faded ink. The inscription, now reproduced in M. Chavannes' *Documents* under No. 674,[6] was quite correctly read on the spot by Chiang Ssŭ-yeh as simply stating that the object to which the little wooden label had once been attached was 'the clothes bag [of one called] Lu Ting-shih'. The hoped-for chronological clue was not here. Yet, as the writing looked so strikingly old, I ventured, in my Sinologist ignorance, to suggest to Chiang Ssŭ-yeh that it was of Han times. The conjecture proved right in the end; but, as told elsewhere, my excellent *literatus* received it at the time with due critical caution.[7]

First finds at T. III.

Chinese record on wood.

This record and the other small objects had turned up within a few square feet, and clearly proved that the ground along the wall, notwithstanding its desert nature, must have been occupied at some points. But at the time it was difficult to decide how they had got into or underneath the wall just where a fortunate chance had made me first examine it. The most likely explanation seemed to be that the small relics dated from a camp, perhaps of a working party, established here at the first construction of the tower and wall, and that they had been accidentally mixed up with the materials for the latter. This conjecture was confirmed when, on a subsequent visit in 1914, I had the wall cleared at the same spot right down to the ground and found more rags of silk and woollen fabrics, with dung and other refuse, resting on the natural soil beneath.

Occupation of ground proved.

Of far greater importance to me at the time than such details was the view of the line of wall, as it showed itself above ground stretching away to the east, and of the chain of watch-towers which could be sighted in the distance. Fortune had favoured me in this respect, too, by making me strike just here the fortified border line—for as such I could now safely recognize it. Owing to its commanding position, close to what proved to be a great bend of the line defended by the watch-towers, the post T. III offered itself as a particularly convenient station for a first rapid survey. Only about two miles to the west, on a last offshoot of the same gravel ridge, there rose another tower, T. IV. b. To the south-west, at least two more could be sighted, though at much greater distances. And here I may mention at once as evidence of the care with which commanding positions had been chosen for these watch-stations, and of their distant visibility over such bare

Chain of watch-towers sighted.

[6] Cf. Chavannes, *Documents*, p. 143. The number of the label, T. III. i. 1, having become partially effaced, has been shown there erroneously as T. i. 1.

[7] Cf. *Desert Cathay*, i. p. 542. The critical self-distrust felt on this occasion by my learned Chinese helpmate has been singled out for special praise by so competent a Sinologist authority as Prof. F. Hirth, when reviewing that work in *The Nation* (New York), August 15, 1912.

ground, that one of these towers, T. v, proved to be fully nine miles, and the other, T. vi. a, not less than fifteen miles, away in a straight line when their positions came to be fixed accurately Yet Surveyor Rām Singh's keen eyes sighted them unaided by glasses. Eastwards, at a distance of a little over three miles, and exactly in line with the visible straight stretch of wall, the tower T. vii showed quite clearly. Another beyond it, T. ix, seemed to indicate a turn of the line to the north-east.[7a]

Line of wall followed eastward.

That day it was too late to attempt a survey of the wall westwards. Instead, I decided to follow the line of wall and towers to the east, in the hope that it would be found to run within reach of the track by which my caravan had been directed to move ahead. The decision was justified. As I followed the line of the ancient wall down steep gravel slopes, and over lower terrace-like ground fringing the scrub-covered Nullah previously mentioned, its remnants cropped out higher and higher. For more than a mile here the wall was continuous and actually exposed five to seven feet above the ground. For several feet more its base seemed buried under drift-sand and gravel, to which decomposed clay, fallen from the destroyed layers of the wall, is likely to have added its share. The average width of the wall was about eight feet. It was quite easy, even without any digging and clearing, to examine here the peculiar method of construction employed, and at the same time to study the process by which wind-erosion was slowly but relentlessly working its destruction.[8]

Reed fascines resist erosion.

The revetment of horizontally fixed fascines had been removed by erosion in most places and was being loosened in the rest. But the alternate layers of stamped clay and bundles of reeds, which had thus become exposed, were still remarkable in their state of preservation. The clay, from six to seven inches in thickness, showed much cohesion, in spite of the coarse material, full of gravel and small pebbles. This was obviously due to the binding quality of the saline elements in the soil.[9] All the same, the exposed surfaces of these layers, by their scooped appearance in places, proved that corrasion was at work on them. On the other hand, the intervening layers of neatly tied reed fascines, here compressed to an average thickness of three to four inches, showed practically no sign as yet of being affected by this destructive force. Previously gained experience made it easy for me to realize that the pliable reeds with their tough fibres could suffer but little from the winds and their corrasive agent the drift-sand, though once loosened from the embedding clay they would quickly be blown away altogether.

[7a] It may be conveniently explained here that in order to obviate risks of confusion in our survey, and to facilitate subsequent identification on the spot, it became necessary to give numbers at once to all ruined towers on the plane-table, as they were sighted from successive stations or 'fixings', even when there was no chance at first of obtaining more than one 'ray' to a particular tower or otherwise determining its exact position. This practical necessity, combined with the fact that numerous ruined watch-stations, owing to their position on masked ground or the decay of their structural remains, could not be recognized from a distance, will help to explain why it was impossible in marking the towers, etc., along the line of this Limes, to follow a strictly consecutive numbering.

[8] The photographs in Figs. 157, 158 will help to illustrate the following observations, though they are of a section of the wall to the north-east of Tun-huang, where the proportion of thickness between the layers of clay and fascines is approximately reversed and another constructive detail also is modified by the introduction of tamarisk twigs into the fascines besides reeds; see below, chap. xv. sec. v.

[9] In regard to this salinity I was able to make an instructive observation near this very portion of the ancient Limes wall when I passed here again on March 17, 1914. I then noticed, between towers T. vii and T. ix, that horizontal streaks of *shōr* or salt efflorescence, running parallel at about seven inches interval, marked the lines where the edges of the layers of reeds, themselves not visible without scraping, approached the surface of the low gravel embankment that hid the remains of the badly-eroded wall. There had been a very slight snowfall some days earlier, and this had sufficed to draw to the surface the saline particles with which the reeds had become permeated, either while still growing in the marshes or since they had been embedded between the layers of clay and gravel.

Wall line tracked to tower T. vii.

The line of wall further to the east had become in many places eroded, and the height of the exposed portion was lower. But even where, after about two miles, it had entered the sandy, scrub-covered depression, its traces in the shape of layers of reeds reappeared again and again on patches of gravel, though elsewhere on softer soil they had decayed completely. Thus the line could be tracked quite straight to within a quarter of a mile of the next tower, T. vii, which rose on the edge of the gravel plateau opposite. This proved to be similar in size and shape to the last, though less well preserved. The construction was varied by the substitution for the brickwork of regular layers of hard stamped clay from two and a half to four and a half inches thick. No reed straw had been put between the layers of clay; but, in order to secure more consistency, roughly-hewn posts of wild poplar wood had been inserted vertically near the four corners and joined together, at intervals of about ten inches, by thick ropes of twisted reeds. Embedded in the clay, these had remained perfectly sound, as could be seen at the north-east corner, where the outer portion of the pisé had fallen to some height above the ground. The whole, like the materials used in the wall, showed plainly how little the physical conditions and resources of this desert ground had changed since wall and towers were constructed.

Access to top of tower.

The purpose of the towers was clearly shown when on the south face of T. vii I noticed a succession of rough foot-holes, made in the solid clay along the centre line and ascending towards the top. They were about a foot apart vertically and were obviously intended to assist a person climbing to the top. The position of the ropes provided to assist him in the performance was still marked by a regular succession of holes which must once have held beams inserted into the masonry and meant to stick out. These beams, always arranged in pairs, about three and a half feet apart and at intervals of four feet vertically, must have secured the ropes that served as a hand-rail. The top, about twenty-two feet from the ground, was no longer accessible, but there could be no doubt that the small space available on it was intended to be occupied by a man or two charged with watching and signalling.

Wall line lost and regained.

No structural remains of any kind were traceable near this tower, and beyond it the continuation of the wall seemed to be lost completely. Therefore, crossing the bare gravel plateau to the north-east, I regained the caravan track, and soon found that it was leading us eastward in the direction of a tower, T. ix, which now came into view in the distance. We had followed the track for scarcely more than a mile when Surveyor Rām Singh's keen eye noticed a very slight swelling on the gravel soil, running parallel to the route and quite close to it on the north. While the rest of the ground was here absolutely bare of vegetation, alive or dead, remains of reeds, half-petrified with salt-encrustation, were seen cropping out on the top and side of the swelling. Mere scraping of the surface sufficed to make it certain that we were moving once more by the side of the old wall, the reeds clearly belonging to the lowest layers of a section now almost completely eroded. Looking back, the eye could catch its line for some distance westwards. But neither then nor on subsequent visits did I succeed in tracing the section which must have formed the connexion with the tower T. vii. It is probable that the complete disappearance of this small section, less than a mile in length, must be ascribed to its lying across, instead of parallel to, the direction of the prevailing east winds of the Tun-huang–An-hsi valley.

Ruined mound of T. viii.

Further east the swelling, almost imperceptible at first, rose till it ran in a perfectly straight line, 6 to 8 feet high. It was easy to make sure by a little digging that the wall still existed here, covered by heaped-up gravel and drift-sand. At a point nearly three miles from T. vii, I noticed a low mound about twenty-four yards to the south of the *agger* marking the wall, which here seemed to make a small curve, like a semi-lune, northward. Pieces of Toghrak wood protruding from the north-east corner of the mound and stones lying on its top clearly showed that it contained the débris of a ruined watch-station, T. viii, as subsequently proved by excavation (see Figs. 166, 168).

A well-preserved tower, T. IX.

From this point onwards, the line of the wall could be traced with ease to the end of that day's march, as it ran practically without a break closely along the route. First, an almost straight stretch of *agger*, with rough branches of Toghrak now mingling with the reeds of the fascines exposed on the surface, brought us after two miles to the massive tower, T. IX (Fig. 173), already sighted from where I had first struck the wall at T. III. It proved to be remarkably well preserved and quite an impressive structure, as it rose to a height of over 25 feet on a commanding knoll above the edge of the gravel plateau which here overlooks a wide depression both eastward and northward. The masonry, very solid and regular, had a base $22\frac{1}{2}$ feet square. The bricks, 14 by 7 inches and 5 inches in thickness, were here set in alternate courses with the longer and shorter sides facing outwards, thin layers of reeds being inserted after every five courses for the sake of additional strength. Though only sun-dried and containing very little or no straw, they were unusually hard; this, I thought, might perhaps be due to the cementing effect of salts contained in the soil or in the water with which they had been made. On the top, big Toghrak beams were visible, as they had been exposed by erosion from the masonry once embedding them. Yet at the foot of the tower erosion had succeeded in lowering the ground level scarcely one foot below the bottom course of brickwork—a clear proof of the protection here afforded to the soil by its surface cover of gravel. But no trace of any adjoining structure or other signs of occupation could be found. The line of the wall passed in a small semi-lune to the north of the tower and at about seventeen feet distance.

Features of watch-tower T. x.

Immediately to the east of T. IX the ground falls off with a steep slope to a wide scrub-covered depression, as seen in Plate 33. Though most of the soil here was composed of coarse sand, and in parts overgrown with reeds and tamarisks, the gravel-covered *agger*, marking the line of the wall and still in places eight or nine feet high, could be followed without difficulty for over three miles to the tower T. x (Fig. 174). This occupied the northern end of an isolated clay ridge, which rises with very steep slopes to about a hundred feet above the steadily widening depression. Its construction varied considerably from that of the other towers visited on that first day along the old Limes wall, and thus helped to impress me at once with the fact that those who had established that line through the desert knew well how to adapt their methods to local resources. Instead of courses of brickwork there were here regular layers of stamped clay, each receding somewhat from the edge of the lower one; the whole thus presented the appearance of a truncated pyramid. The layers, each one foot ten inches in thickness, were hardened and bound together into concrete-like consistency by the salt contained in the gravelly soil with which they were built. The same agent had caused the intervening strata, about two inches thick, of tamarisk brushwood and sticks to become almost petrified. The structure with its salt impregnation curiously shimmered in the dusk, as the other towers might have shimmered in the old times when they still carried the thick coats of whitewash of which we subsequently found plentiful traces. About twenty-five feet square at the base, the tower rose to close on thirty feet, though, as Fig. 174 shows, the south and part of the east face had fallen.

Wall line traced to lake shore.

The very mode of construction here used implied that water was near at the time. Nor did it prove distant now. Within about half a mile the track crossed a salt-encrusted, marshy bed into which a small brook of very salt water made its way from the south-west. Beyond extended an area of luxuriant reed beds and Toghrak groves, and there I found my camp pitched close to a small lake. Though salt in its lower portion, it held quite drinkable water along its southern margin where it was fed by springs.[10] Next morning I returned to the wall and found that it ran in a practically straight line from T. x to the lake-bed, which it struck almost at right angles near the middle of the south shore. The remains of fascines, half-petrified with salt, could be traced without

[10] The salinity there measured on March 18, 1914, varied from 0·46 to 0·20.

difficulty to a point about twenty-five yards from the edge of the salt-encrusted lake. As its level lay only five feet or so below the exposed foot of the wall, it was clear that the extent of 'desiccation' since the wall was built could here not have been great. This at once supplied evidence which was archaeologically very helpful and afterwards received support from many other observations. But it was even more important to note how the lake had been used as a substitute for the strange wall elsewhere guarding the line. It soon became clear to me that those who laid down the line carefully kept their eyes on all natural features which might serve for defence, in order to save themselves building labour on ground that in ancient times was already desert.

Section V.—RUINS BY THE SU-LO HO MARSHES

Plan for exploring Limes.

The archaeological evidence gathered in the course of that first day's exploration sufficed to convince me that the ruins I had passed, and those to be expected in continuation eastwards, belonged to an early system of frontier defence or *Limes*, corresponding in character to the existing 'Great Wall' shown by the maps on the north-western borders of Kan-su. The historical records discussed above in connexion with the route through Lou-lan made it appear *a priori* very probable that this defensive system dated back to Han times. Its thorough exploration appealed to me as a task combining both archaeological and geographical interest, and hence of special importance. So I decided there and then to return to the old border line in the desert as soon as men and animals had recovered from their fatigues by a short rest at the Tun-huang oasis. There alone would it be possible, too, to secure the fresh supplies and transport of which we were badly in need.

Watch-station T. xi.

Opportunities for getting more familiar with details of the ancient Limes occurred frequently on our journey of March 9. After skirting the winding south shore of the lake for about a mile and a half among abundant reed-beds, the caravan track brought me to the narrow southern end of a steep gravel-covered plateau, about 80 to 100 feet high, which edges the lake on its east side. On the highest knoll, overlooking the route below for a considerable distance on either side, there rose the ruin, massive but badly decayed, of a watch-tower, T. xi (Fig. 178). In size and methods of construction it closely resembled T. x. There was evidence here of more or less continuous occupation in the shape of what seemed to be rubbish-heaps both within and without a small enclosure around the tower. A short scramble along the back of the plateau or ridge, here less than half a mile wide, soon brought into view the old Limes wall, running approximately east and west and displaying its characteristic reed fascines. It started on the west from the shore of the lake opposite to the one where I had last traced it that morning, and ran across the ridge down to the edge of another marshy basin eastwards.

Marshes supplement defensive line.

Two more towers could be sighted beyond the lakelets in this depression. Their position and the general configuration of the ground made me feel certain that the line of the wall ran more or less parallel to the end of the Su-lo Ho drainage. The marshy basins connected with this drainage had evidently been utilized, wherever possible, to supplement or replace the actual defences of the line to be guarded. The conclusion seemed to be justified—and subsequent experience soon confirmed it—that the route leading to Tun-huang would keep within it and probably near it. The track brought us, indeed, after about five miles from camp, close to the next tower, T. xii, situated at the end of a narrow plateau which overlooked the southern portion of the second basin. But the wall could not be traced near that tower, as it evidently followed a line further away to the north, and there was no time then to search for it.

Succession of towers sighted.

For the rest of the day's march, the succession of distant towers on our left kept rising above the grey, hazy horizon like a line of yellowish beacons. I was eager to visit them all there and then.

But the stretches of deceptive desert ground intervening, and the great détours which marshy depressions were likely to cause, made it impossible for me to attempt this. Luckily the route allowed us to fix the positions of the towers with approximate precision on the plane-table. Thus it was seen that the distance from tower to tower varied considerably, with a general average of about two miles. This, too, confirmed the impression that the line which they were intended to guard had been adapted with care to the natural features of the ground. From the neighbourhood of T. x onwards I had noted frequent cart-ruts, some apparently recent, along or branching off from our route, and had drawn from them the conclusion that, desolate as the whole region seemed, it was yet at times being visited by Chinese from the Tun-huang oasis in search of fuel or marsh grazing. So I was not surprised when, on reaching after about ten miles the edge of another long-stretched depression full of luxuriant reed-beds and containing a series of spring-fed marshes (Map No. 74. D. 3), I came upon the remains of a hut and small Chinese shrine manifestly modern in their appearance.

Ruined fort T. xiv.

On a neck of higher ground within the depression there rose a ruined fort, T. xiv, small but of remarkably massive appearance. Fig. 183 shows it as seen from the north-east, and Fig. 184 from the south-west, with the gate in the west face. Its walls, built of very hard and well-laid strata of stamped clay, each about three inches thick, rose in very fair preservation to a height of close on thirty feet. Fully fifteen feet thick at their base, they formed a solid square, approximately orientated and measuring about eighty-five feet on each outer face (see plan, Plate 40). There was no trace of earlier quarters inside, and only scanty refuse from recent occupation by wayfarers. But the very massiveness of construction and the damage which the east and north walls had in spite of it suffered through erosion, as seen in Fig. 183, were enough to convey the impression of considerable antiquity.

Wide view commanded from fort.

From the top of the little stronghold a wide and impressive view opened. To the south, the marshy depression was seen to merge soon in a belt of Toghrak and tamarisk jungle. Beyond it an absolutely bare gravel glacis rose towards the equally barren foot-hills of a great range far away, of which the snowy crest line then remained hidden. To the north-east, at least four towers, lit up by the sun behind us, could be sighted quite clearly in the distance. In faint streaks of brown, which my glasses seemed to show here and there over the flat expanse of grey in the same direction, I thought that I could still recognize remains of the line of wall of which those towers were the silent guardians. A fine position it seemed, this height of the fort wall, for a commandant surveying the whole line of watch-stations, and for those who were to look out for the signals sent along it. At a considerable distance beyond the line of towers, the sombre, barren hills of the Kuruk-tāgh, rising in a succession of serrated chains and void of all life for ages past, formed a reddish-brown background. I knew that somewhere between the foot of the outer hills and the line which the towers marked the drainage of the Su-lo Ho was bound to have once cut its way westwards. But even from that commanding position it was in vain that I tried to locate it. On a later reconnaissance, too, made to the north of T. xiv, the deeply-cut bed of the river, sunk like a hidden fosse in the deceptive gravel 'Sai', escaped me, though I closely approached it.

Large ruined structure.

But as the march continued across a sterile gravel plateau till the evening, I noticed that the route was bringing us nearer and nearer to a wide marshy basin stretching approximately east to west, as seen in Map No. 78. A. 3, and manifestly part of the true Su-lo Ho trough. We had been skirting its steep southern bank for about a mile, and were approaching a roughly-built and much-decayed tower, T. xviii, that stood near its edge, when the twilight showed me a huge structure rising from the low ground which fringed the basin (Fig. 186). The first hurried inspection, made before it became quite dark, just sufficed to reveal the imposing dimensions of the building and its massive construction. But even when next morning I was able to revisit it from our camp,

which had been pitched at a neighbouring spring, the character of this grand ruin remained puzzling.

Halls and enclosure.

It comprised three palace-like halls, with a total frontage of over 440 feet, as seen in the plan, Plate 41 ; the walls, built of stamped clay and fully six feet thick, still rose to a height of about twenty-five feet, though badly broken in parts. The building occupied the top of a natural clay terrace, some fifteen feet high, which had been cut down steeply on all sides to serve as a base, and this added greatly to the appearance of height. There were remains of a massive walled enclosure, with high towers at the corners as if guarding a palace court, and traces of a rampart outside this. Yet the position occupied by the whole clearly proved that this palatial structure could not have been intended as a fortified station. Its true character was not discovered until systematic exploration of the ruins became possible a month and a half later. But fortunately Hasan Ākhūn, my experienced head camel-man,[1] had carefully searched the ground at the foot of the ruin and picked up there two copper coins. They proved to be of the *Wu-chu* type of the Han, and thus furnished the first distinct indication as to the antiquity of this site.

Line of towers flanking marsh.

Straight to the north and at a short distance extended a wide marsh, made up partly of salt-encrusted bog and partly of reed-fringed lagoons, where in ancient times, just as now, it would be neither necessary nor possible to continue the line of wall. But to the north-west and north-east towers were in view, marking the line which had to be guarded. My glasses showed quite clearly that the nearest towers, T. xvii. a, xix, xx, were all built on small isolated clay ridges or Mesas, such as rose in numbers above the flat expanse of the marshy basin. Obviously the constructors of the line had been fully alive to the advantages which these commanding positions offered both for widened outlook and for safety, and had duly used them.

Rows of Mesas in riverine basin.

At the time my geographical interest was aroused even more by the striking resemblance which these clay ridges and terraces, generally ranged in rows running here from south-east to north-west and further on from south to north, bore to the great array of Mesas which I had found in the dried-up basin east of Bēsh-toghrak. It seemed like an exact reproduction of the aspect which that old terminal lake-bed might have borne before desiccation had removed water and vegetation from near those eroded formations. Since then my explorations of 1914 have given me an opportunity of visiting ground to the north-east of the Lou-lan Site where the surface conditions existing during the early centuries of our era, as attested by my archaeological discoveries on and around the high clay terraces of that area, must have exactly corresponded to those still observable along this part of the Tun-huang Limes.[2] Another interesting illustration of physical conditions long past elsewhere was afforded by the rows of living Toghraks which closely lined the water-channels and lagoons visible from afar within the wide marsh belt. Their growth clearly betokened the presence of fresh and, at least periodically, running water. But it was not until my return six weeks later that I obtained ocular proof that the Su-lo Ho waters actually passed through and inundated this basin during the spring and summer floods. Meanwhile the view obtained from a distance sufficed to recall to my mind those lines of dead Toghraks I had crossed so often in the desert on my march to the Lou-lan Site.[3]

Ruined watch-stations on Mesas.

The fodder supply brought from Abdal for our ponies had by now been completely exhausted, and this necessitated our gaining Tun-huang without any avoidable delay. So on the long march, which brought us on March 10 to the last halting-place with water before crossing the absolutely barren desert of gravel to the edge of the oasis, I had reluctantly to renounce all explorations off the route. This took us first for over fourteen miles through an unbroken belt of abundant jungle

[1] Cf. e.g. *Ancient Khotan*, i. p. 312.

[2] Cf. *Third Journey of Exploration*, *Geogr. Journal*, xlviii. pp. 123 sqq.

[3] See above, pp. 355 sq.

and scrub, spreading also into a succession of big bays on the south. At two points to the north of, and not far from, the track, I passed remains of small watch-stations, T. XXI, T. XXII, occupying the tops of isolated Mesas. Near the second of these we came upon a couple of Muhammadan Chinese or Tungans grazing cattle and horses, the first human beings met with since the start from Abdal.

Lake Khara-nōr.

Beyond this, the route still leading due east crossed a series of long and narrow gravel-strewn ridges which from the plateau on our right jutted out northward like the fingers of a hand. The depressions between them contained spring-fed marshes, and were connected with a wide salt-covered basin on the north. But this was too far off for close survey, and it was not till later that it could be recognized as containing the lake usually designated on European maps by its Mongol name of *Khara-nōr*, 'the Black Lake', and erroneously believed to be the termination of the Su-lo Ho until our surveys proved that it was not. It was the presence of this large sheet of water,[4] forming a safe line of defence by itself, which explained why no towers could be sighted here to the north.

Eroded clay terraces.

Then the narrow continuous ridges gave way to a wide bay, bare of vegetation in its northern portion and covered with long rows of those characteristic clay terraces that were familiar to me in the vicinity of lake basins dried up or undergoing desiccation (Fig. 146). The terraces here had their long side invariably stretching from south to north. It was easy to recognize that they represented the remnants of earlier continuous ridges, such as the route had just crossed at right angles, which the erosive force of the violent east winds prevailing in this region, and of the coarse sand driven before them, had slowly sawn through and cut up. The origin of the ridges themselves could be accounted for with equal ease. They owed their existence manifestly to depressions scooped out between them by the drainage which once, during moister periods, came down the gravel glacis from the foot of the mountains on the south and cut deep into the clay sediments of a far more ancient lacustrine basin.[4a] I have thought it useful to record here this quasi-geological observation; for the surface features thus produced have largely determined the line chosen for the ancient Limes in this region.

Ruined towers by Khara-nōr.

At last we emerged from between these terraces to an open stretch of flat ground extending northward, and there first came in sight of the Khara-nōr, a large sheet of dark blue water at a distance of some four miles. The wide salt-encrusted edges showed that its level at a later season would rise higher and the area covered by its water considerably expand. A number of isolated clay terraces, regular Mesas, rose scattered over the flat shore to the north-east, where it was covered with abundant vegetation. They were manifestly the last survivals from terrace clusters and ridges which the slow but relentless force of erosion had long ago ground down and carried off. On two of them, not far from what looked like the eastern end of the lake, I sighted ruined watch-towers.[5] A third, T. XXIII, perched at the end of a long ridge projecting into the flat basin from the south, rose immediately above the route just where it took a final turn to the south-east. The wide depression containing the bed and marsh basins of the Su-lo Ho was now left behind, and moving over bare, gently rising ground, evidently part of the alluvial fan once formed by the Tang Ho, or

[4] Our surveys made at the close of March, 1914, have proved that the area covered by the lake at that time extended some four miles further east than shown on Map No. 78. B. 3. On the other hand, a series of additional towers then discovered along this eastern extension of the lake showed that its bed on this side could not have formed a permanent barrier in ancient times. Probably it lies dry even nowadays for a considerable portion of the year.

[4a] Cf. below, p. 589.

[5] These towers, T. XXIII. b, c, have not been correctly marked on Map No. 78. B. 3. They could not be explored until 1914, and the survey then made proved that T. XXIII. c is situated about four miles to the north-west of C. 157 and T. XXIII. b about a mile further. It is at the latter tower that the line of wall abandons its general east–west direction to turn towards the south-east and thus approach the Tun-huang oasis.

river of Tun-huang, we reached in the dark a spring-fed pool known to the Lopliks as Yantak-kuduk.

After leaving, on March 11, this convenient halting-place, we moved over an absolutely bare gravel 'Sai', unbroken in its sterile uniformity except by two dry flood-beds, until after about seventeen miles we almost suddenly stepped across the edge of Tun-huang cultivation. Close to it I halted for the night near a small Chinese hamlet, and next morning my camp was moved to outside the walled town of Tun-huang Hsien, which was destined to become the base for my antiquarian operations of the next three months.

Final march to Tun-huang.

CHAPTER XV

THE TUN-HUANG OASIS AND ITS NORTHERN LIMES

SECTION I.—GEOGRAPHICAL FEATURES OF THE LOWER SU-LO HO BASIN

First stay at Tun-huang.

IN Chapter LI of my Personal Narrative I have given a full account of the impressions I gathered during my first stay at Tun-huang, which a multitude of tasks, quite as much as the urgent need of rest for my men and beasts, made to extend from the 12th to the 22nd of March, 1907.[1] It was my first visit to ground having a purely Chinese population, and the experiences soon gained at Tun-huang prepared me for the difficulties with which I should have to contend in the course of my work there. The following chapters will show how it was possible for me, largely through a variety of fortunate circumstances, among which the devoted help of Chiang Ssŭ-yeh prominently deserves mention, to bring back from this archaeological venture results far more abundant than I could reasonably have hoped for. Among those difficulties there is one which requires specially to be emphasized at the outset, because it affects very closely the record I am able to give here of my explorations in Kan-su, and in particular of those in the Tun-huang region.

Want of Sinologist training.

I mean my complete lack of Sinologist training. It is true, as related in *Desert Cathay*, that I managed to acquire through constant practice with Chiang Ssŭ-yeh, ever ready to talk and enlighten, a modicum of conversational Chinese, in the Hunanese variety of the Mandarin, which in the end allowed me to transact simple practical business myself, and which with Chiang's help also proved useful for securing official goodwill and at times antiquarian clues. But the written language remained a sealed book for me. I have, perhaps, even more reason to regret this great disadvantage now when recording the results of my labours, because it prevents any attempt on my part to review, in a connected form, the history of the region which yielded the archaeological and other remains I have to describe.

Historical records of Tun-huang.

Tun-huang 敦煌, as the local Chinese, still clinging to the ancient Han name, best know the oasis which in our books and maps usually figures under the designation *Sha-chou* 沙州, the 'City of Sands', introduced in T'ang times, has played an important part throughout the periods when Chinese power and influence were effectively asserted in Central Asia. Even during times such as those following the decay of the empire under the later Chin and T'ang rulers, the continued existence in those westernmost marches of a Chinese administration under small local dynasties is attested.[2] Hence, the materials concerning the history of this frontier territory available in the dynastic Annals and in other Chinese records are likely to be sufficiently abundant. But only an insignificant portion of them has as yet become accessible in translations. This fact precludes any attempt on my part to preface the account of my explorations in this region by a sketch of its history from Chinese sources. Instead of making this attempt, I shall be content to use such Chinese historical notices as are accessible to me wherever they can directly throw light on archaeological or topographical points connected with my work. I shall have to observe the same limitation also as regards the territories further east to which my Kan-su explorations extended.

[1] See *Desert Cathay*, ii. pp. 9–38.

[2] Cf. M. Chavannes' note, *Ancient Khotan*, i. p. 543, note 4; Chavannes, *Dix inscriptions*, pp. 80 sqq.

Fortunately no such difficulty arises about the treatment of the main geographical facts which have had a determining influence on the history of the Tun-huang tract, and in particular explain its importance as the advanced base for the first expansion of Chinese political and military power westwards. Of these geographical facts I propose to present here a brief general survey based on what my own observations showed me. In regard to them, too, there were limitations imposed which may appropriately receive mention here. Owing to the extent of the desert ground which had to be explored for the sake of tracing the remains of the ancient Chinese Limes, the greater portion of the time I could devote to the Tun-huang region, three months in all, had to be spent far away from its inhabited parts. Most of the remainder was subsequently claimed by antiquarian tasks of absorbing interest and importance, which detained me for more than three weeks at the cave temples of *Ch'ien-fo-tung* or the 'Thousand Buddhas', in the solitude of a true Thebaid. Thus, apart from the topographical facts which our surveys, as recorded in Map No. 78, supplied, I had little opportunity to examine closely the economic conditions of the cultivated area, its resources in population, irrigable land, water-supply, etc. **Geographical facts about Tun-huang.**

But besides the limited time available there were other difficulties to contend with. A very serious one was created by the secretive reticence of the Chinese population, which invariably denied any and every answer to questions that could possibly be supposed to have a bearing on local interests, directly or indirectly. This attitude of suspicious reserve was even more pronounced in Tun-huang than elsewhere in Kan-su. It was probably fostered also by the strong particularist feeling which seemed to pervade the local population, and which made these descendants of the quondam guardians of the empire's western outpost distinctly difficult to handle. The confidential information on this subject which we received from Wang Ta-lao-yeh, the well-meaning and scholarly district magistrate, to whom I was indebted for much help, was borne out only too well by the outbreak of which he himself subsequently became the victim.[3] **Difficulties of observation.**

Another grave impediment to correct conclusions on these subjects arose directly from the results of the most recent of the historical cataclysms to which Tun-huang appears to have been always exposed, and from more than one quarter. Like most of the Kan-su tracts eastward, Tun-huang is but slowly recovering now from the effects of the terrible devastations which accompanied the last great rebellion of the Tungans, or Muhammadan Chinese, and which between the years 1862–73 in the Tun-huang region destroyed the greater part of the original population. The extensive ruins of abandoned homesteads and walled villages which were to be met with throughout the length and breadth of the oasis bore silent, but only too eloquent, evidence to the extent of the destruction wrought by that succession of murderous inroads. From the point of view of the historical student this evidence was instructive enough. But it is obvious that impressions, gathered after such a prolonged time of upheaval and unchecked by reliable local information, could not form an adequate base for gauging the present resources of the Tun-huang oasis, and still less those which it may have offered during earlier periods. **Devastation of Tungan rebellion.**

These economic resources of Tun-huang must have had an important bearing upon the rôle which the oasis has played in the history of China's relations with Central Asia, and with the Tārīm Basin in particular. But essentially that rôle was determined by broad geographical facts connected with the position of Tun-huang in the great valley of the Su-lo Ho. By looking at any general map which shows Kan-su as well as the Central-Asian territories comprised in Chinese Turkestān[4] it is easy to realize that the wide valley drained by the lower course of the Su-lo Ho **Route down Su-lo Ho Basin.**

[3] Cf. *Desert Cathay*, ii. pp. 35 sq., 41, 233, 294.

[4] See e. g. the map on scale 1 : 4,200,000, reproduced in vol. iii of the Report on Captain Roborovsky's expedition; also Stieler, *Atlas*, Map No. 64.

forms the easiest and nearest approach from China to the Tārīm Basin. From the place where this important river, fed by the glaciers and permanent snows of the Central Nan-shan, breaks through the last outer range and makes its great bend to the west, it runs almost due east to west for a direct distance of over 200 miles. Throughout open, as seen in Maps Nos. 74, 78, 81, 83, 85, this lower Su-lo Ho Basin offers itself as the natural continuation westwards of the great highway which starts from Lan-chou, the capital of Kan-su, and the upper Huang Ho. This route skirts the northern slopes of the Nan-shan and passes through a succession of fertile tracts that contain the big towns of Liang-chou, Kan-chou, and Su-chou, and an almost unbroken chain of smaller settlements. Nor are such settlements wanting on that section of the great China-Turkestān trade route, between Su-chou and Yü-mên-hsien, where it crosses by a series of broad plateaus the easy watershed dividing the drainage areas of the Pei-ta Ho, or Su-chou River, and the Su-lo Ho.[5]

Western highway of Kan-su.

Road along N. foot of Nan-shan.

No other line of communication can ever have offered such facilities for intercourse between China and Eastern Turkestān as the route along the submontane belt between the Huang Ho and Su-lo Ho which has just been briefly outlined. For large movements of troops or trade convoys it is, in fact, the only practicable route. To the south extend the snowy ranges of the Nan-shan and the forbidding high plateaus of northernmost Tibet, in the Koko-nōr and Tsaidam regions. On the north, that long but narrow belt of cultivable ground is bordered by the deserts and almost equally barren hills of southernmost Mongolia, where no permanent habitations or cultivated areas could be found for distances requiring months of caravan journey. It is a necessary consequence of these physical facts that, from the earliest period of Chinese expansion westwards, the assertion of the empire's power in Central Asia has depended upon the safe possession of this great natural high road.

Road to west opened by Chinese, 121 B.C.

This is very clearly brought out by the passage of the Former Han Annals which records the first great move of Chinese 'forward policy' under the Emperor Wu-ti. It tells us that, after the defeat of the Huns in 121 B.C., which cleared them from the territories adjoining the Nan-shan, 'the region of Chiu-ch'üan (i. e. Su-chou) was first established, and afterwards gradually the people were removed in to fill it. He also divided the three territories of Wu-wei (the present Liang-chou), Chang-yeh (now Kan-chou), and Tun-huang into four regions, for which he made two barriers.'[6] When almost exactly two thousand years later the Chinese imperial forces, after the crushing of the great Tai-ping rebellion in the south, were preparing for the reconquest of Chinese Turkestān, then under Yākūb Bēg's rule, the course of operations here described had to be repeated closely, *mutatis mutandis*. The Tungan rebels were driven off the fertile belt at the north foot of the Nan-shan, the great 'Imperial Road' leading through it secured by a line of cantonments and watch-stations, and the almost depopulated oases recolonized from China before the Chinese forces under the famous generals Liu Chin-tang and Tso Tsung-tang could set out in 1877 victoriously to win back the lost 'New Dominions'.[7]

Main lines of advance from Su-lo Ho.

As soon as the lower Su-lo Ho basin is gained, two main lines of advance are open into the lands which, now once more, form China's Central-Asian foothold. One leads via Tun-huang down to the terminal basin of the Su-lo Ho, and thence in ancient times had its most direct and important continuation westwards, as we have seen, down the Bēsh-toghrak valley to the dried-up Lop sea-bed and to Lou-lan. The other, equally straight, now turns off from An-hsi, the old

[5] See Maps Nos. 85, 86, 88; cf. also *Desert Cathay*, ii. p. 337.

[6] Cf. Wylie, *Notes on the Western Regions*, *J. Anthrop. Inst.*, x. p. 22; also Chavannes, *Documents*, p. v. The two 'barriers' in the 'Wall' which the text refers to are the *kuan* of *Yü-mên*, the 'Jade Gate', and *Yang*, about which see below, pp. 620 sqq.; chap. XIX. i, ii.

[7] For this interesting modern chapter in the history of China's relations with Central Asia, cf. Boulger, *The History of China*, iii. pp. 732–744.

Kua-chou, north-westwards to the foot of the easternmost T'ien-shan, and gains it at the ancient oasis of Hāmi, or Kumul. This route, too, as we have already had occasion to note, is of early date, its passage through Hāmi being definitely mentioned in the Later Han Annals.[8] Through changes largely physical, which we had to consider repeatedly in connexion with Lou-lan, this route became in T'ang times the main artery of traffic between China and Central Asia, and remains so to the present day. I shall have to discuss it and its possible variants on the east and west in a subsequent chapter.[8a] Here it may suffice to point out that it is solely on account of its position where the present highway leaves the Su-lo Ho, to strike across the desert ranges of the Pei-shan to Hāmi, that the collection of modest villages now grouped as the 'district' of An-hsi figures more prominently in our maps and in Chinese administrative classification than the far greater and richer oasis of Tun-huang.

Road through An-hsi to Hāmi.

It was different in Han times, when Tun-huang was famous among the four 'commands' of *Ho-hsi*, or Western Kan-su, side by side with Liang-chou, Kan-chou, and Su-chou.[9] Tun-huang derived its importance for the Chinese then from the great advantages which its geographical position and resources offered, and which are easy to recognize even now when the line of the great Central-Asian route has finally shifted northward. It represents the largest area capable of continuous cultivation which can be found now, or is likely to have existed in historical times, between Su-chou and Khotan, a distance of over 1,200 miles. Compared with its extent of arable land, even now a compact stretch over twenty miles long from south to north and about sixteen miles at its widest part, the oases that lie eastward to Su-chou are small, and those in the Lop region insignificant. It is easy to realize how great in consequence was the value which Tun-huang possessed for the Chinese at the time of their first advance into the Tārīm Basin, and while the most direct route via Lou-lan remained open. It was increased by the fact that this important base of supplies for the movements of troops and trading caravans lay so far west, at the very point where the Lou-lan route entered the great wastes of desert ground wholly devoid of human sustenance.

Importance of Tun-huang.

Tun-huang owes its comparatively large area of cultivation wholly to the fact that it occupies an extensive and easily irrigated alluvial fan at the very debouchure of a considerable river which affords an abundant and, at the critical seasons, reliable supply of water. As I have had occasion to emphasize elsewhere, there exists a very close affinity between practically all the physical features of the lower Su-lo Ho Basin and those of the Tārīm Basin. Both are inland drainage areas of exactly analogous climatic conditions, and probably, as mentioned above, at an earlier period had their lowest depressions linked up.[10] It is a necessary result of this close agreement in essential geographical factors that here, as in the Tārīm Basin, the extent of cultivation is entirely dependent upon the natural facilities for irrigation.

Physical conditions at Tun-huang.

At Tun-huang these conditions are more favourable than anywhere else between Su-chou in the east and Khotan or Kuchā in the west. The Tang Ho, or river of Tun-huang, is a river of considerable volume, which breaks through the main range of the western Nan-shan and, as Captain Roborovsky's fine map on the scale of 1 : 840,000 shows, drains a high mountain area to the south quite as large as, if not larger than, that drained by the Su-lo Ho. Among the ranges feeding it there are several which raise their crests well above the permanent snow line, and must carry extensive snow beds and even glaciers of some size. This is certainly true of the range which we surveyed on its northern slope between Shih-pao-ch'êng and Ch'ang-ma, and which, as Map No. 84 shows, has peaks over 20,000 feet high. Its drainage to the south flows mainly

Irrigation facilities of Tun-huang.

[8] See above, pp. 329 sq., 563; Chavannes, *T'oung-pao*, 1907, pp. 156, 169.

[8a] See below, ch. XXVIII. sec. i.

[9] Cf. Chavannes, *T'oung-pao*, 1906, p. 258, note 2; *Documents*, p. v; Wylie, *J. Anthrop. Inst.*, x. p. 22.

[10] Cf. *Desert Cathay*, i. 535 sqq.; above, pp. 550 sq.

into the Yeh-ma Ho, one of the tributaries of the Tang Ho. The great volume of the latter is sufficiently proved by the fact that on April 5, 1907, its bed, where it passes outside the town of Tun-huang, carried no less than about 2,100 cubic feet of water per second, even though at that time the big canals of the oasis, which take off above the town and close to the river's debouchure, were all full to overflowing.[11] They were equally full during the latter half of May when I returned from the Limes, by which time the volume of unused water passing down the river-bed had appreciably risen. Yet this is just a period when the rivers irrigating the southern oases of the Tārīm Basin, e.g. in the Khotan region, fall very low after the passing of the spring flood, and do not suffice to fill more than a small proportion of the canals at one time.

Extent of cultivable area.

It may, I think, be safely concluded from these and kindred observations, rough as they necessarily are, that the amount of the water-supply in the Tang Ho at present available for irrigation is considerably larger than is required for the now cultivated area of the oasis. It would also more than suffice if this area were extended so as to include the large strips of ground, both within the oasis and outside its present limits to the north and east, which have only been abandoned since the time of the Tungan inroads. From the depopulation which they left behind the oasis is but slowly recovering, and want of labour still retards the reoccupation of considerable tracts obviously fertile and well commanded by existing canals. Without more detailed surveys, for which there was not adequate time, it would be impossible to give the approximate extent of all the lands thus abandoned in the sixties of the last century, and still awaiting reclamation. It would be equally impossible to arrive at any conjectural estimate as to the total area outside the present oasis which might have been cultivated during ancient times, when there was a population large enough to make full use of the available resources for irrigation, and when political conditions were such as to assure safety and economic development.[12]

Alluvial fan of Tang-Ho.

There are two more physical features favouring Tun-huang cultivation to which attention may be drawn here in conclusion. It is a great advantage that, owing to the slope, soil, etc., of the alluvial fan, the large volume of water brought down by the Tang Ho can be utilized for irrigation almost from the river's debouchure. This makes the safe construction of canal heads much easier, and at the same time prevents the serious loss of water through evaporation and percolation which must take place wherever canals, owing to the configuration of the ground, have to be carried over considerable distances of bare gravel 'Sai' before they reach soil suitable for cultivation. The other important advantage is that the alluvial fan formed by the Tang Ho extends sufficiently far, before meeting the Su-lo Ho bed at right angles, to afford adequate space for using most, if

[11] I measured the discharge at the bridge facing the western city gate. The width of the bed actually carrying water was about 120 feet, with an average depth of three to four feet. The current flowed 100 yards in 52 seconds. The width of the river above and below the bridge was far greater, indicating the much increased volume of the summer flood.

[12] Peculiar conditions on the surface of the ground adjoining the present limits of the oasis make it difficult to trace remains which might help to mark its earlier extension. To the east, where the ground would have made it likely in ancient times, being composed of fertile alluvial loess, subsoil moisture is abundant, and this, together with the luxuriant scrub which it supports, does not favour the survival of remains of such structures of sun-dried bricks and timber as Chinese villages and towns usually contain. The almost total disappearance of structural remains within the walled towns of the An-hsi tract, abandoned only in the last century or two, affords striking evidence of this. The same cause prevents wind-erosion on this ground and the appearance of 'Tati' remains on the surface.

To the north, in the delta of the Tang Ho, remains of earlier occupation may have disappeared through inadequate drainage of the canal ends, which has caused the ground to be water-logged at certain seasons and produced the bare salt-encrusted steppe shown on the map (No. 78. D. 3). When in March, 1914, I traced the continuation of the Limes over the previously unsurveyed gap (Map No. 78. C. 3) to the west of the Tang Ho, I came upon fertile strips of ground, with old towers and ruined farms, between freshwater marshes formed by the overflow of the canal ends and inundations from the Tang Ho. Here, too, no structural remains of ancient date or traces of earlier canals could be expected to survive.

not all, of the great supply of water that is available. In support of this I may point out that the distance from the debouchure of the Tang Ho, where the canals on the left bank take off (Map No. 78. c. 4), to the Su-lo Ho is close on thirty-six miles in a straight line.

Irrigation from Su-lo Ho.

Conditions are very different as regards irrigation from the Su-lo Ho itself. Though this river, owing to the great length and height of the snowy Nan-shan ranges which it drains (Maps Nos. 86, 87, 89), carries a considerably greater volume of water,[13] the series of small oases from Yü-mên-hsien to An-hsi, which receive their irrigation from it (Maps Nos. 81, 83, 85), cannot compare in extent and economic resources with Tun-huang.[14] Their relative insignificance can be traced throughout the periods for which historical records bearing on this border region are available. It is directly accounted for by the difficulties which beset the use of the Su-lo Ho water, abundant as it is, for irrigation purposes, and with which local engineering has neither in the past nor in the present time been able to cope successfully. The Su-lo Ho, from the point where it breaks in a narrow gorge through the outermost Nan-shan range north of the oasis of Ch'ang-ma (Maps Nos. 83. D. 4; 84. D. 1), divides into several branches, which often shift their courses on the steeply sloped stony glacis of that range, and cannot be utilized for irrigating cultivable soil anywhere nearer than about thirty miles from the debouchure.[15]

Difficulties of Su-lo Ho irrigation.

On reaching the alluvial basin they cut their beds very deeply into the soft soil. This is particularly characteristic of the main Su-lo Ho course after its great westward bend below the Yü-mên-hsien oasis. Thence, until it passes the foot of the low Wan-shan-tzŭ spur about a day's march above An-hsi (Map No. 83. B. 2), the river flows everywhere in a deep cañon-like bed, and the use of its water for irrigation purposes becomes practically impossible. This was shown very clearly by the closer survey which my journey along the right river-bank in April, 1914, enabled me to make. From the western end of the Wan-shan-tzŭ spur down to An-hsi, the taking-off of canals becomes practicable again on the left bank. But here the area capable of being irrigated is greatly reduced by the close approach of a range of foot-hills on the south (Maps Nos. 81. D. 3; 83. A. 3). A short distance below An-hsi the inundations and marshes caused by the floods of the T'a-shih river and other small streams from the south stop cultivation. Further west, the Su-lo Ho forsakes its so far deep and well-marked bed and spreads out in a network of flood courses and marginal lagoons, which extend past the marshy Tang Ho delta to the Khara-nōr and beyond. These, along with the increasing salinity of the water, altogether prevent irrigation.

Defensive line provided by Su-lo Ho.

From this rapid survey it is clear that the value of the lower Su-lo Ho for the maintenance of permanent agricultural settlements is and always was very limited, as compared with that of the river of Tun-huang. But in another direction there were advantages offered by this lower Su-lo Ho course which are even more obvious. A reference to the map shows that, with its direction almost due east to west, it provided a truly ideal line for the protection of that great military and trade route upon the security of which China's earliest expansion into Central Asia depended. With that unfailing sense of topography which the Chinese seem to have possessed at all times, and which shows itself with particular clearness wherever measures for defence or communication are concerned, those charged with the opening and organization of that highway were bound to realize from the first the natural strength and importance of the Su-lo Ho line. My explorations of 1907, and those by which I supplemented them eastward in 1914, have proved in fact that, from

[13] I can give no comparative measurements, but the fact is quite plainly established by the east–west course of the lower Su-lo Ho, which also determines the direction of the united river after the Tang Ho has joined it at right angles.

[14] This fact is graphically illustrated by Captain Roborovsky's map, which shows these smaller oases on the same sheet with Tun-huang and permits ready comparison of their relative sizes.

[15] The fall in the levels of the river-bed from Ch'ang-ma to Yü-mên-hsien, a distance of only about thirty-six miles, amounts to fully 2,000 feet.

the bend below Yü-mên-hsien right through to the terminal basin, the line of the river was followed by the Limes wall and its chain of watch-stations intended to safeguard that road from attacks of the Huns, who then commanded the regions to the north, including the oases on either side of the eastern T'ien-shan. The clearness of the broad geographical facts makes it possible for me to explain here quite briefly the advantages thus secured, without going into any of the details which we shall have to consider further on in connexion with the actual remains of the Limes.

Ancient border line along Su-lo Ho.

On the east, the line of the ancient Han 'Wall', coming from the junction of the rivers of Kan-chou and Su-chou, and carried through the desert far to the north of the great Su-chou oasis, first touched the Su-lo Ho at its bend below Yü-mên-hsien.[16] Thence it followed the right, or northern, bank of the river quite closely down to a point facing the Wan-shan-tzŭ ridge (Map No. 83. B. 2) previously mentioned.[16a] By keeping this part of their line to the northern bank for a distance of about forty miles those who laid down the Limes gained several advantages. Besides securing the water-supply for their own posts—a very important consideration in this barren region—the line thus drawn kept any Hun raiding parties which might cross the Pei-shan desert on the north from gaining access to water and grazing. It similarly prevented their close approach to the cultivated area, which, as seen from the Maps (Nos. 83. B–D. 2; 85. A. 2), here runs down to the river's left bank. Below the Wan-shan-tzŭ ridge and above the little oasis of Hsiao-wan, the Limes was carried across to the left bank under the protection of high ground abutting on the river from both sides, and thence followed this bank at varying distances all the way down to the terminal basin of the Su-lo Ho.

River strengthens Limes defence.

The advantages which were obtained by keeping to the river's southern bank along this big section of the Limes, approximately 160 miles in length, were, if anything, even greater. The continuous belt of riverine marshes and lake-beds, which commences below An-hsi and extends along almost the whole of the Su-lo Ho's terminal course, very considerably increased the defensive strength of the Limes. It added to it a formidable natural barrier; for the marshes and interlacing beds of the river make, as it were, a huge fosse, which in most places is impassable throughout the year and in others very troublesome during spring and summer. Where there were lakes or deep lagoons, it was possible, as we shall see, by including them in the line, to restrict the Limes to a chain of towers, and thus for considerable stretches to save the very serious effort which the building of the wall involved under forbidding desert conditions.

Protection by waterless desert north.

It is true that by keeping the Limes to the south of the long belt of riverine marshes such Hun raiders as could make their way from the north were allowed access to water and grazing. But against this it has to be remembered that in the desert west of the Tun-huang–Hāmi route, wells or springs of drinkable water must even in ancient times have been very rare, if they were not altogether wanting, as they are at present.[17] Thus nature had here

[16] For a brief preliminary account of this eastern section of the Limes explored in 1914, cf. my *Third Journey of Exploration*, *Geogr. Journal*, xlviii, pp. 195 sq., and the provisional sketch-map attached to it. [The new surveys are embodied in Sheets 40, 42 of the 1 : 500,000 Map.]

[16a] For the Limes line from Yü-mên-hsien to An-hsi, see below, chap. XXVII. sec. v.

[17] The track that leads from the eastern end of the Tang Ho delta below Tun-huang towards Hāmi is the last westwards of the several routes connecting the Hāmi oasis with the lower Su-lo Ho Basin on which caravan traffic is made possible by the existence of a string of wells or springs with drinkable, if brackish, water. It joins the more easterly track, now followed by the Chinese 'high road' from An-hsi to Hāmi, at the well of K'u-shui (Map No. 76. c. 5), and is nowhere separated from it by more than about thirty-eight miles, as shown by Captain Roborovsky's survey in the Russian Trans-frontier Map XXI.

Of the two other routes which the same map marks, on the authority of natives, as lying west of the Tun-huang-Hāmi route, one, according to information kindly communicated to me by Professor Pelliot, has no existence in reality, and merely represents a duplication of it caused by the record of a different set of names for the same series of wells. The existence of the second route further to the west seems to be equally problematical; for Captain Roborovsky, who attempted to follow it from below the western end of the Khara-nōr, found no wells on it for a distance of over sixty

provided a protective zone of waterless ground very difficult to penetrate even for small parties. The safety from raids which this belt assured must have become progressively greater as the route advanced westwards beyond the terminal Su-lo Ho course; for there the central portion of the Kuruk-tāgh, wholly devoid of water, pasture, and even fuel, widens more and more on the north and renders any crossing by mounted parties practically impossible. The huge sand ridges of the Kum-tāgh desert provided the Lou-lan route with an equally safe flanking defence on the south, and we shall see further on how skilfully the flank of the Limes itself was protected on the same side. Thus it is quite certain that no risks of human interference in the shape of Hun raids had to be feared on that part of the ancient route which lay west of the terminal basin of the Su-lo Ho.

Natural difficulties *versus* enemy risks.

Chinese statesmen—and soldiers, too,—seem at all times to have been particularly sensitive to such risks, and far less ready to face them than those arising from natural difficulties. This fact deserves to be emphasized here in concluding our rapid survey of the geographical factors which determined the importance of Tun-huang and the extension of the westernmost Chinese Limes beyond it. For it helps to explain at the same time why the Emperor Wu-ti's commanders carried their line of wall and watch-stations so far out into the desert as the Su-lo Ho's terminal basin, and also why they originally fixed upon the Lou-lan route in spite of all its formidable natural obstacles.

Section II.—IN SEARCH OF THE 'OLD WALL' NORTHWARD

First visit to 'Thousand Buddhas' Caves'.

Though I was kept busy during my ten days' halt outside Tun-huang town by manifold tasks, I had taken the earliest chance they left me for a first visit to the famous site of old Buddhist temple grottoes, known as *Ch'ien-fo-tung*, or the 'Caves of the Thousand Buddhas'. They are situated about twelve miles to the south-east of the town, where a barren valley flanked by conglomerate cliffs debouches from the dune-covered foot-hills (Map No. 78. D. 4). My attention had been first directed to them in 1902 by Professor L. de Lóczy, the distinguished head of the

miles and was forced through want of water to return to the lake; cf. the map, 24 versts to 1 inch, attached to vol. iii of the Report on his expedition, and the account of this excursion given *ibid.*, i. pp. 164 sqq., as translated by Dr. Hedin in *Central Asia*, ii. pp. 100 sqq. As to the possible identity of this route, if it ever existed, with the 'new northern route', which the Former Han Annals mention as having been opened in A.D. 2, see below, chap. xix. sec. vi.

Dr. Hedin's own journey into the central Kuruk-tāgh, described *loc. cit.*, ii. pp. 104 sqq., carried him first from Bēsh-toghrak north to a point approximately 90° 26′ long., 41° 28′ lat., and thence to the springs of Āltmish-bulak. Nowhere on this journey was water to be found, until after eleven marches a salt spring was reached, known to wild-camel hunters from Singer as Kaurük-bulak, about thirty-two miles to the east-north-east of Āltmish-bulak.

The region of the central Kuruk-tāgh to the north-east of Āltmish-bulak, which R. B. Lāl Singh under my instructions surveyed in 1914 close up to 42° lat. (cf. *Geogr. Journal*, xlviii. pp. 205 sq.), proved equally waterless and, if anything, even more sterile through the total absence of desert vegetation, living or dead, over great stretches of ground.

It may thus be considered as certain that the desert ranges and plateaus of the Kuruk-tāgh, to the north of a line drawn from Kaurük-bulak (itself north-east of the Lou-lan Site) to Bēsh-toghrak and the terminal Su-lo Ho Basin, are now wholly devoid of water as far north as the Shona-nōr, the terminal marsh of the Hāmi River, a direct distance of not less than 160 miles from Bēsh-toghrak. This big area of absolute desert could not be traversed at the present day except with camels and during the winter, when the transport of ice would facilitate the provision of water.

I can find nothing to justify the belief that the physical conditions on this ground could have been essentially different in Han times, and consequently I feel convinced that the ancient route between the end of the Limes and Lou-lan must have been then as well protected by nature against human interference from the north as it would be now, if raiding Huns were established along the T'ien-shan. It is true that Dr. Hedin, about one march to the north of Bēsh-toghrak, came upon some cairns and fragments of an iron cooking-pot (see *Central Asia*, ii. pp. 106 sq.). But the date of these relics is quite uncertain, and, having been found not far from the Bēsh-toghrak valley, they might well have been left behind by hunters of wild camels.

Hungarian Geological Survey and President of the Geographical Society of Hungary, who, as a member of Count Széchenyi's expedition and thus as a pioneer of modern geographical exploration in westernmost China, had visited these cave-temples as early as 1879. Though not himself a student of Eastern art and antiquities, he had been greatly struck by the importance and artistic interest of the remains. His glowing description of the fine fresco paintings and stucco sculptures that he had seen there, and the close connexion with early Indian art which he thought to have recognized in some of them, had aroused my deep interest and supplied the main cause for the extension of my expedition so far eastwards.

Prospects of fruitful work.

In my Personal Narrative I have endeavoured to describe the vivid impressions with which that first rapid visit paid on March 16 to the wonderful site of the 'Thousand Buddhas' had filled me.[1] They abundantly sufficed to show me how rich was the field which here opened for the study of Buddhist pictorial and sculptural art in China. Inadequately equipped as I felt myself to be for a task of this nature and magnitude, I realized the importance of securing whatever materials I could for a record of these artistic treasures, and the consequent need of a prolonged stay. My hope of thus aiding research in other directions also was greatly strengthened when that first visit yielded evidence, small in extent but unexpectedly definite, that there was a real foundation for the vague rumours I had first heard at Tun-huang through Zahīd Bēg, a Turkī trader from Urumchi settled there in exile, about the accidental discovery of a great deposit of ancient manuscripts hidden in one of the cave-temples.

Preparations for Limes exploration.

The fascinating prospects held out by my plans upon the 'Thousand Buddhas' made me feel doubly anxious to begin without delay the exploration of the ancient Chinese Limes. That this was a task which ought necessarily to come first at this season was quite clear from my Taklamakān experiences of the climatic conditions that were likely to prevail in the desert as soon as the winter had passed. It was essential that I should start back to the line of the ruined wall and watch-stations well provided in the matter of guides, diggers, and supplies in order to obviate needless delay in my proposed operations. In all these respects serious difficulties soon revealed themselves. Of the ruins I was anxious to trace and explore in the desert nothing was known to the scholarly magistrate of the *hsien*, Wang Ta-lao-yeh, a new arrival from another part of Kan-su, nor to his military confrère, Lin Ta-jên, the commander of the local militia, though both from the first showed friendly interest in my work and to the end proved very attentive and helpful.[2] Whether it might have been different with any of the other educated Chinese in the town, I am unable to state. But, in any case, the deep-rooted secretiveness of the local Chinese population effectively prevented any offer of guidance from them or from such Tungan herdsmen and hunters as occasionally visit the nearer of the riverine jungles.

Difficulties about labour and transport.

How great were the troubles about labour and transport which had to be faced and overcome during the next two months, I have related in some detail elsewhere.[3] Here it must suffice to mention that, what with the general scantiness of labour, due to depopulation; with the easy life and consequent indolence prevailing among the people of Tun-huang in general; with the weakness of the local administration, and—last but not least—the innate dread of the 'Gobi', or desert, shared by all Chinese, even the provision of the dozen or so of diggers we managed to secure in the end from Tun-huang, all hopeless opium-smoking wastrels, proved a very serious business for my official patrons. I had ample opportunity, then and after, to observe how different from the conditions familiar to me in Chinese Turkestān were the relations between nominal rulers

[1] Cf. *Desert Cathay*, ii. pp. 20 sqq.

[2] Regarding these two sympathetic and well-meaning officers, typical representatives of the pre-revolution hierarchy in these outlying parts of China, cf. *Desert Cathay*, ii. pp. 14 sq., 17 sq., 33 sqq., 69, 232 sqq.

[3] See *Desert Cathay*, ii. pp. 32 sqq.

and ruled in these outlying parts of China proper. It seemed to me—and the statements made in confidence by my official friends confirmed this observation, which has a certain historical interest—that there survived, among the Tun-huang people in particular, a lingering consciousness of being, as it were, military colonists guarding an important outpost of the empire, and a strong sense of local individuality. They certainly needed handling with special care and discretion on the part of those put in authority over them, and the serious local outbreak, to which Wang Ta-lao-yeh became a victim soon after my departure from the district, strikingly demonstrated that even such qualities would not always suffice to avert trouble.

Start north of Tun-huang.

Of the fortified border line westwards, and of the opportunities for interesting archaeological work that its remains might offer, I had been able to form some idea on my journey to Tun-huang. But I had been obliged to turn away from it before reaching Yantak-kuduk, and thus there remained the question whether the line of wall really continued to the north of the oasis also, and what its direction might be beyond it. This problem, in conjunction with some vague information about a 'kōne-shahr' which Zahīd Bēg gave, decided me to start my explorations by striking due north towards the Su-lo Ho course. The first march, which took me on March 23 to the small village of Shih-tsao, showed me plentiful marks of the destruction left behind by the Tungan raids, though some thirty-eight years were said to have passed since the last of them. The further we passed from the town, the more frequent became the sight of ruined homesteads and temples. Yet the land around them was once more under careful cultivation. Another significant feature was the number of large bastioned forts I sighted here and elsewhere within the oasis, defended by high and massive walls of clay, recent in appearance. The houses within were few and rarely tenanted.

Village forts recall Tungan raids.

These strongholds had all been built or repaired by the neighbouring villagers when Tungan raids threatened during the years of the great rebellion, or at the time of more recent Muhammadan risings in the Hsi-ning region. When the raids actually did reach the oasis in the sixties of the last century, these scattered places of refuge had fallen, one after the other, an easy prey to the onslaught of the fanatical rebels, who spared neither women nor children. Only that portion of the population escaped which sought safety in the town of Tun-huang, and there many were carried off by starvation during a long, if intermittent, siege. These little village-forts, known as *p'u-tzŭ* or *pao-tzŭ* 堡子, became a very familiar sight to me throughout the Kan-su oases that I visited.[4] What prompted their construction or maintenance was solely the traditional Chinese policy of seeking safety behind high walls, however inadequate their defence might be in numbers or spirit. The appearance of these places of refuge strongly recalled to me the Pathān village forts, or 'Killas', so common in the turbulent tribal tracts beyond the Indian North-west Frontier. Yet what utterly misleading conclusions as to the character of the peaceful Kan-su settlers might be drawn from this apparent resemblance by a future archaeologist, who would see only the ruins of their ill-fated attempts at defence!

Reclamation of deserted fields.

So far we had followed the cart road leading to Hāmi. On the following day we struck to the north-west and crossed successive stretches of fertile land, left deserted since Tungan days, between others where cultivation had been resumed. It was very instructive to see how new homesteads of modest dimensions had been established among the ruins of more substantial dwellings built before the Tungan inroads, and how young plantations of trees were growing up amongst the few old elms which had survived the period when this tract had remained without people and its timber had been at the mercy of wood-cutters from Tun-huang town. How often the oases of the Tārīm Basin, whether abandoned or still inhabited, may have seen a similar process! Then we approached the left bank of the Tang Ho and crossed a deep channel taking off from it, which evidently was an old canal of importance (Map No. 78. D. 3). Beyond it extended a wide steppe of reeds and scrub,

[4] For photographs of such fortified villages, cf. *Desert Cathay*, ii. Figs. 218, 221, 230, 253.

then partially flooded, where the reclamation of old abandoned fields could be seen actually proceeding in places.

Ruined town of Shih-pan-tung.

The 'kōne-shahr' of which Zahīd Bēg had told me, and to which our Chinese companions gave the name of Shih-pan-tung,[5] proved a ruined 'town', indeed, but one abandoned only since the great Tungan rising. Nevertheless, there was something of archaeological interest to be learned from an examination of its remains. They were those of a typical small Chinese town enclosed by crumbling ramparts of stamped clay, which formed an approximately orientated square of about 375 yards on each face. Its dimensions thus showed a close approach to those of the ancient Lou-lan station. The little town, which had served as an administrative centre for the northern portion of the oasis, had been sacked by the Tungan rebels some forty years before, and had since fallen into complete ruin. The enclosing walls had crumbled away in places into a mere *agger*, or mound. Heaps of shapeless débris, with remnants of walls of sun-dried bricks, extended over the greater part of the interior, marking the position of houses. Any timber that they once contained had long been carried away, and plentiful tamarisk scrub was growing both among the low débris heaps and over the empty spaces. But the alignment of the usual two main streets crossing each other at right angles, somewhat after the fashion of a Roman *castrum*, could still be made out clearly.

Wrecked temple and *Ya-mên*.

Through the gate in the centre of the southern wall passed the main road towards a ruined temple, raised on a mound and masking the north gate (Fig. 151). Its walls, built of hard bricks with plenty of terra-cotta relievo work in the usual Chinese style, still carried a roof over the second story, which, raised on a massive base of sun-dried bricks, formed a separate shrine. The stucco images which it sheltered were all badly broken by vandal hands, but manifestly still objects of worship, and a large decorated bronze bell was left *in situ*, in spite of Tungan wrecking. There was evidence here that continuity of local cult was asserting itself amid the surrounding desolation. I found similar proofs of its tenacity again and again among the many ruined sites of recent date within the parts of Kan-su that I subsequently visited. Less successful than this continuance of the gods in old quarters, but perhaps equally significant in a way, was the attempt which seemed to have been made to reoccupy a small *Ya-mên* situated on the central road and not far from the south gate. It was solidly built and comprised some rooms still roofed, but in a state of collapse. Some petty official appeared to have returned here after the town was deserted, perhaps charged with an attempt to re-colonize it. Auspicious sentences penned on scarlet paper and other written relics of official occupation still stuck to walls and posts. As I walked across the débris area and along the line of the decayed walls, passing more than one rubbish-heap, I thought of the rich archaeological deposits which might await some successor in the distant future—if only the ground would dry up completely!

Ruined tower T. XXIV.

On the following morning the march was resumed to the north-north-east, where, from the height of the town wall, I had sighted a watch-tower. It was reached after crossing for close on four miles a scrub-covered steppe, bearing obvious marks of old cultivation, where large patches had been recently cleared by burning and were now being flooded for sowing. The tower, T. XXIV in Map No. 78. D. 3, occupied the top of a small clay ridge about eleven feet high and was manifestly of old construction; for its masonry, consisting of hard lumps of clay impregnated with salt, which had been quarried on the spot and used as bricks, showed the same regular layers of reeds and tamarisk twigs, here at intervals of about ten inches, which were characteristic of the masonry

[5] This and all other Chinese local names recorded in the Kan-su sheets of the Map have been carefully transcribed by Dr. L. Giles from the record in Chinese characters which was made at the time by Chiang Ssŭ-yeh in connexion with our survey. This record, I regret, is not accessible to me at present. Hence the Chinese forms of the names cannot be shown here.

in the towers guarding the old wall west of the oasis. The tower, measuring about twenty feet square at its base and rising to over eighteen feet, formed a remarkably compact mass, probably on account of the cementing effect of the salts which had been absorbed in the material. Its solidity, as well as its age, could be gauged from the way in which wind erosion had carried off the natural clay beneath the corners without any injury to the overhanging masonry.

Approach Su-lo Ho.

Of the hoped-for line of wall there was, however, no trace to be seen here. Nor did I notice any old remains as we pushed on to the north-north-east, where I wished in the first place to locate the course of the Su-lo Ho. The ground we crossed for another four miles was covered with rich scrub and tamarisks, and two rough enclosures, made of very hard lumps of salty clay and evidently intended as sheep pens, showed that it had been used at one time for grazing. From the top of a low and narrow clay ridge then encountered I first sighted on the north a wide marshy expanse, indicating approach to the river. In the midst of it a succession of clay terraces was ranged in rows, all striking east to west. It was a very instructive sight, as it recalled at once the eroded clay Mesas I had passed in such numbers within the dry terminal basin of the Su-lo Ho, north of the present one, and again in the vicinity of the Khara-nōr.[6]

Origin of clay terraces.

It soon furnished also the manifest explanation of their origin. A mile or so further on we came to the first freshwater lagoon, and then had to ford a succession of shallow watercourses, all flowing westwards and fed from the river. It was easy to realize here the cause which had determined the bearing of the rows of clay terraces. It was clearly the action of flood-water which, working on the bottom deposits of an earlier and wider alluvial bed, had carved out ridges parallel to its own line of drainage from east to west. Subsequent erosion by winds blowing mainly from the north-east had cut up these ridges into rows of isolated terraces, and this scouring still continued on the bare clay surface raised above the flood level. Here I had a striking illustration of that very process of erosion, by the combined forces of running water and wind, to which I had been led to ascribe conjecturally the formation of those strange Mesa 'witnesses' previously found after leaving Bēsh-toghrak in basins now wholly or partially dry. We shall see what careful use had been made by those who constructed the Limes line of the excellent positions which these high clay terraces furnished for watch-stations. Hence this quasi-geological explanation of their origin may well find a record here.

Stopped by Su-lo Ho inundation.

For two and a half miles beyond the first clay ridge I succeeded in pushing on northward across belts of boggy ground and a network of shallow flood channels running between the chains of clay terraces. After I had crossed with difficulty a channel about twenty yards wide and 4–5 feet deep, in which the water flowed briskly, the main course of the Su-lo Ho came in. sight at last, marked by a wide sheet of ice. But the ground had long before this proved quite impracticable for laden camels, and the intention of sending the Surveyor across the Su-lo Ho, in order to have the whole of its terminal course mapped from the right bank, had to be abandoned.[7] Camp was pitched by the side of the first lagoon reached, and next morning I retraced our route to the southernmost clay ridge, and thence started eastwards in search of the continuation of the Limes line that I was eager to locate. The ruined remains which Captain Roborovsky's map marked by the side of the route to Hāmi, and which, I conjectured, might possibly have some connexion with it, still lay a considerable distance away to the east and could not be expected to guide us. But within two miles or so in that direction rose a conspicuous tower, already sighted on the previous day's march, and to that I now led my party.

The reed-covered steppe which had to be crossed to it showed traces of fields and irrigation cuts

[6] See above, pp. 552, 575 sq.

[7] This task was in 1914 successfully performed under my instructions by R. B. Lāl Singh, but in the reverse direction.

Ruined tower, T. xxv.

so clearly marked as to make their recent abandonment obvious, and with this the structure of the tower, T. xxv (Fig. 152, Plate 34), fully agreed. It was built on a clay ridge, rising about sixteen feet above the depression on the north, and proved both massive and remarkably well preserved. Measuring twenty-six feet square at the base, it rose to a height of about twenty feet. Its top bore a brick parapet and within this a roofless cella, open to the south, but provided with the peculiar masking wall which usually serves to screen the street entrances in modern Chinese temples or mansions. The cella walls, some ten feet high, still retained a good deal of plastering. It was impossible to examine this superstructure more closely, because the ladder-like stairs which once led up to it on the west side, as shown by the holes in the masonry left for beams, had disappeared.

Brickwork of later date.

A variety of details proved that the tower could not be of an early date. The bricks were much smaller than those in the towers which had been examined along the ancient wall to the west, measuring only 12 by 6 inches, with a thickness of two inches. The characteristic thin layers of reeds between courses at regular intervals were not to be found here. But quite as significant was the observation that the cella walls and parapet had alternate courses of bricks set horizontally and vertically, i. e. on edge, a mode of construction that I never met on Chinese soil except in modern or mediaeval buildings. For traces of the ancient wall I searched in vain; but to the south a low earth rampart about 100 feet square adjoined the tower and evidently marked an enclosure. From what I saw later on of similar towers at different points outside the Tun-huang oasis, I conclude that T. xxv was a structure of somewhat recent origin, intended to serve as a place of observation and temporary refuge for a small outlying settlement.

Search for Limes line.

In the absence of any more towers I felt puzzled as to the best way of continuing the search for the wall, but decided to march on further east, where in any case we could expect to strike the cart track leading north towards Hāmi, and thus secure guidance to Roborovsky's ruins. When, after a march of about four miles, the plane-table was fixed on one of the few isolated clay terraces rising above the scrubby plain, I scanned the horizon in vain for any tower or other guiding mark. But the Surveyor's keen eyes noticed animals grazing in the distance, and after a couple of miles' ride eastwards we came upon a large flock of sheep, cows, camels, and ponies guarded by two armed Tungans, their owners.

Guidance of Tungan nomads.

It proved a very fortunate encounter. The nomads looked rough, and their truculent ways could scarcely have roused confidence in solitary wayfarers; but they were well acquainted with the riverine grazing-grounds on the lower Su-lo Ho, and, in contrast with the secretive reticence of the settled Chinese, had the saving grace of pride in their local knowledge. When questioned about 'old P'ao-t'ais' and offered a reward, the elder of the Tungans agreed to guide us to a point where water for camping might be found and a sight of some towers obtained. He proved true to his promise. A ride of another three miles or so to the north-east under his guidance brought us to an isolated clay terrace some forty feet high, on the edge of a wide marshy belt stretching away to the river. He called the spot Ch'ing-shui-k'êng-tzŭ (see Map No. 81. A. 2). Once on the top, he pointed to the south and south-east, and there I could sight through my glasses no less than ten towers extending in a line approximately east to west. In spite of their ruined state and the distance, which subsequently proved to be from five to ten miles, they were lit up clearly on the horizon by the yellowish rays of the sinking sun. I could not feel any doubt that they marked the alignment of the old wall for which I was searching, and the sturdy ruffian by my side had reason to be satisfied with the reward in silver I there and then gave him.

Towers marking 'old Han road'.

I was still gazing at the line of towers through my prismatic glasses when, without any hesitation or questioning, he jerked out the information that they marked 'the old Han road from An-hsi to Lop-nōr'. It seemed like a strange confirmation of the conjecture to which M. Bonin had

first given expression, and of a belief which a series of antiquarian observations had steadily helped to foster in me, though in a somewhat different form. But there was no evidence yet as to the correctness of the dating which the Tungan's statement implied, nor even was it possible to make sure whether it was derived merely from a shrewd guess or from some genuine tradition. He did not claim himself to have followed this 'old Han road' much further west. All he would assert was that an elder brother of his, since trading at Hsi-ning-fu, had taken a strange, i. e. non-Chinese, *kuan*, or official, along it soon after the old route from Tun-huang to Lop-nōr was reopened. This detail makes it appear to me very probable that the foreign traveller meant was the ill-fated M. Martin, who, as related above, was the first European in modern times to make his way through the desert from Tun-huang to Abdal and Khotan, but did not live to record his story.[8]

Ruined station on Hāmi road.

Far away to the north-north-east and beyond the river there was visible a large group of ruined buildings, of which our Tungan spoke as heathen temples. Owing to the flooded state of the river, they were not accessible from our camp. Later information leads me to believe that these ruins were of recent origin, belonging to an abandoned roadside station on the route to Hāmi. My endeavours to retain the hardy Tungan as a guide in these regions proved of no avail. As related elsewhere, he soon left us with a promise to return in the morning, which he did not keep, and was then searched for in vain. Thus there vanished from my horizon for good the only man who could or would tell me of the 'old wall'.

Section III.—FIRST DISCOVERY OF DATED HAN RECORDS AT T. xxvii

Limes wall discovered at T. xxvi.

On the morning of March 27 I set out with my Indian assistants and half a dozen Chinese labourers to the south-east. There I hoped to strike approximately the middle of the line of towers I had sighted. From the low-lying, scrub-covered plain across which we had to move they were invisible. But another conspicuous clay terrace helped to guide. On reaching it after some two and a half miles, we found on it a small troglodyte dwelling, occupied by an old Chinese wood-cutter.[1] He professed, as was to be expected, total ignorance of old towers and everything else. Beyond this, a belt of exceptionally thick scrub and low tamarisk-cones, among which a small channel coming from the Su-lo Ho was steadily spreading inundation, impeded both view and progress. At last we emerged at the foot of a gently sloping, gravel-covered 'Sai' with much dead wood on the ground and a few stunted Toghraks still alive. Then, in front of me, I saw rising the truncated cone of an old watch-tower, in shape and construction just like those previously examined in the desert westwards. As I galloped towards it, my eye soon caught the line of a low mound, with the familiar fascines exposed on the eroded surface, stretching away across the bare gravel to the nearest tower on the east, and continuing also with a divergent angle to the south-west. Then I felt quite assured that I was back again on my 'old wall' or *chiu ch'iang*, as our Chinese soon learned to call it.

Watch-tower T. xxvi.

The watch-tower, T. xxvi (Fig. 150), was strongly built of regular courses of hard clay, each from $3\frac{1}{2}$ to 4 inches in thickness, between which were embedded the characteristic thin layers of tamarisk brushwood. The four faces of the solid square structure slanted slightly inwards. In order to give additional cohesion, the stamped clay had been reinforced by the insertion of vertical posts, which were probably joined up within by other timber, and of which one was conspicuously exposed on the top (see Fig. 150). At its base the tower measured approximately twenty feet square, and its height, in spite of the broken top, still rose to about twenty-five feet.

[8] Cf. above, p. 565.

[1] This point is marked in Map No. 81. A. 3 by our subsequent Camp 166.

Limes wall with tamarisk fascines.

The wall which the tower was intended to guard passed to the north of it with a bastion-like projection, keeping at a distance of nineteen feet or so from the north foot of the base. Erosion by wind and driving sand, the force of which we felt only too well amidst the bitterly cold blasts of these days, chiefly coming from the east and north-east, had long ago carried off all but the lowest layer of fascines in the wall (Fig. 161). Here they were made up entirely of tamarisk branches, a clear proof that the character of the vegetation on the adjoining ground towards the Su-lo Ho had undergone no great change since the time when the wall was constructed. But the ends of these lowest fascines cropped out so clearly from the overlying stratum of pebble-filled clay and gravel on the level flat that the line of wall, thus marked as a low but distinct swelling, could be followed by the eye with ease and to a considerable distance. The next tower to the east, T. XXXI, towards which the line of this *agger* ran quite straight, proved to be only one and a quarter miles away. Beyond it three more towers, T. XXXII–XXXIV, were within sight; but I had to leave the examination of them till later.

Chinese documents found at T. XXVI.

Returning to tower T. XXVI, I had a close search made of the ground immediately adjoining it. Unpromising enough it looked, as the gravel surface was perfectly bare and level except for some clay débris fallen from the tower close to its east foot. But a kind chance provided encouragement at the outset. At a spot about twelve feet from the south-east corner of the base, careful examination of the surface showed slight refuse cropping out among the pebbles. After the ground had been scraped here (see Fig. 150), it proved to be the last remnant of the miscellaneous rubbish that once filled a small apartment about eight feet square. Of its walls, built with clay and faced with reeds and plaster, only traces survived. But even this shelter, scanty as it was, had sufficed to preserve relics of interest and obvious antiquity. The first to turn up, and almost on the surface, was a wooden tablet, T. XXVI. 1, over ten inches long and close on one inch in its actual width, bearing Chinese characters neatly inscribed in five small columns and a larger single line below them. The document, which Chiang Ssŭ-yeh at once recognized as part of an account, will be found deciphered and reproduced in M. Chavannes' *Documents chinois*, No. 702, Plate XX, and has proved to contain part of a multiplication table. No evidence of date such as I was eagerly looking out for was to be found either in this tablet or in two other fragmentary Chinese records on wood. One, T. XXVI. 3 (*Documents*, No. 703, Plate XIX), with very clear writing, was part of a broken label which, as M. Chavannes' decipherment has shown, refers to a cross-bow and arrows of a certain military detachment; the other was a piece from a record of the 'slip' type, so familiar to me among the Chinese documents of the Niya and Lou-lan Sites, showing merely two characters. A fourth record, also a 'slip', was less broken, but its numerous characters were rendered illegible by salt that had permeated the wood.

Discovery of Han coins.

Chiang Ssŭ-yeh declared that the writing bore a strangely ancient look, and scanty as were these records, the mere fact of their material being wood, and their discovery at a spot of so little apparent promise, were enough to justify further hopes. The ground near the tower was scraped eagerly down to the natural soil by the labourers, whom a prompt reward in silver had now roused from their torpor. But in addition to numerous pieces of broken pottery, all of black, well-burnt clay, marked on the outer surface with narrow parallel ridges due to the matting in which the ware was moulded, there turned up only a small wooden knob, painted black, T. XXVI. 001, of uncertain use, and a much-worn shoe of woven hemp string, T. XXVI. 002, of which details will be found in the Descriptive List below. The pottery and the shoe have since proved to belong to types which I can now safely associate with Han times. But at the time I gave a more grateful welcome to the chronological evidence supplied by two Han copper coins of the *Wu-chu* type, much clipped and corroded, which were discovered adhering to each other at five yards' distance to the west of the

tower, and about a foot below the surface. Yet obviously these coins could not by themselves suffice for the dating of a ruin which even at the present day is within reach of people from the Tun-huang oasis; for we know that this type must have continued to circulate right down to the beginning of the T'ang period.

Watch-tower T. XXVII traced.

I next proceeded to the first tower visible to the south-west, whence return to camp would be shorter for the tender feet of our Chinese diggers. For about three-quarters of a mile the low, gravel-covered plateau—for such it proved to be—continued, and for this distance I could trace the line of the wall with ease. As parts of it were still over three feet in height, I could ascertain that the method of construction was exactly of the type first observed near T. III, tamarisk branches being used instead of reeds for the fascines which intervened between the successive layers of stamped clay. Beyond, I lost the wall on difficult ground, true *terrain coupé*, where soft eroded soil lay amidst scattered tamarisk-cones and dunes rising up to fifteen feet or so. After another mile and a half we arrived at the ruin sighted, T. XXVII (Fig. 153; Plate 34). Though badly decayed, especially on the east and south, it could clearly be recognized as that of a watch-tower. It had been built on a narrow clay ridge, undoubtedly of the type and origin previously described, and extending as usual from east to west. A section of this ridge is also shown in Plate 34. The top of the terrace, occupied by the tower, rose about seventeen feet above the level of the eroded ground on the south and showed clear marks of erosion having continued since the tower was erected. To this fact it is due that the original dimensions of its base could not be measured with accuracy. Brickwork could be traced on the north face for about twenty-two feet and on the west for about nineteen feet; but there can be little doubt that this tower, too, had been, as usual, square in ground plan. It was built of sun-dried bricks, full of straw and rather soft, measuring on the average eighteen by nineteen inches, with a thickness of seven inches. Its actual height was about seventeen feet.

Chinese slips on wood from T. XXVII.

Close to the west side of the tower was a mass of fairly soft refuse, extending over the top of the ridge for a length of about fifteen feet (Fig. 155). As subsequent clearing showed (see Plate 34) it overlay the remains of a small structure, poorly built and partially cut into the natural clay, and filled it to a height of three to four feet. Scarcely had the men been set to work on this refuse when there turned up, on the south-west and quite close to the surface, three wooden slips inscribed with quite clear Chinese characters, T. XXVII. 1–3 (*Doc.*, Nos. 577, 564, 563; Plates XVI, XVII).[2] They were in perfect preservation and of the usual size, being close on nine and a half inches in length and from a quarter to half an inch wide. Chiang Ssŭ-yeh at first sight recognized that two of them bore full dates, a most welcome discovery. Presently three more inscribed 'slips' emerged from under six inches to a foot of rubbish in the middle of the heap. One of them, T. XXVII. 5 (*Doc.*, No. 566, Plate XVI), though incomplete through being burned at one end, also bore a date. It was obvious that I had struck a good mine. But there was no time left to clear it with care before nightfall, and, as it was impossible to locate the *nien-haos*, or regnal periods, without reference to tables, I hastened to return to camp. Both Chiang and myself were greatly exercised by conjectures about the age which the dated records would reveal for the ruined towers and the line of wall guarded by them.

Identification of *nien-haos*.

Arrived in camp I settled down with Chiang Ssŭ-yeh to search for the 'Nien-haos' in the chronological tables attached to Mayers' *Chinese Reader's Manual*. In the absence of any definite clue, hundreds of regnal periods had to be searched through within the limits which seemed possible, from Han to Sung times. Of the reading of one Nien-hao, *Yung P'ing* 永平, in T. XXVII. 5, Chiang

[2] The site-mark T. XXVII. 1 of No. 577 appears through a misreading as T. XXVII. 6[1] in *Documents*, p. 125, and in Pl. XVII, *ibid.*

felt quite sure. Unfortunately this proved to occur repeatedly, in the sixth as well as in the third century A. D., and further back I scarcely ventured to look. In the other Nien-hao *Chien* 建 . . . , shown by T. XXVII. 2, 3, my learned Secretary was at a loss how to identify the second character, though written clearly enough in both slips. No Sinologue familiar with the intricacies of Chinese palaeography will wonder at his doubts, nor have anything but praise for the scholarly frankness with which my excellent literatus-friend was wont at all times to express his difficulties.

Dated Chinese record of A. D. 50.

In vain I searched near the *Yung P'ing* periods previously mentioned for any Nien-hao which might give Chiang Ssŭ-yeh a clue to *Chien* . . . . At last I had the courage to look back a few centuries: there was a *Yung P'ing* period beginning in A. D. 58, and, separated from it only by one Nien-hao covering an interval of two years, there stood the regnal title of *Chien Wu* 建 武. When I showed it to Chiang, he at once recognized in it the second character which had puzzled him so far. *Chien Wu* was the first regnal title adopted by the Emperor Kuang Wu-ti, who in A. D. 25 founded the Later Han dynasty, and the twenty-sixth year of it, which is the date recorded in both the documents T. XXVII. 2, 3, thus proved to correspond to A. D. 50. There could be no doubt any longer that the old frontier wall, the ruins of which I had determined to explore, went at least as far back as the first century of our era, and that the wooden documents which I had in my hands as proof were the oldest original Chinese records in writing, as distinct from inscriptions, so far brought to light. It was a discovery both gratifying and inspiriting: all along archaeological evidence had caused me to put faith in the antiquity of this Limes, and now I felt fresh confidence in its successful exploration.

Excavation started at T. XXVIII.

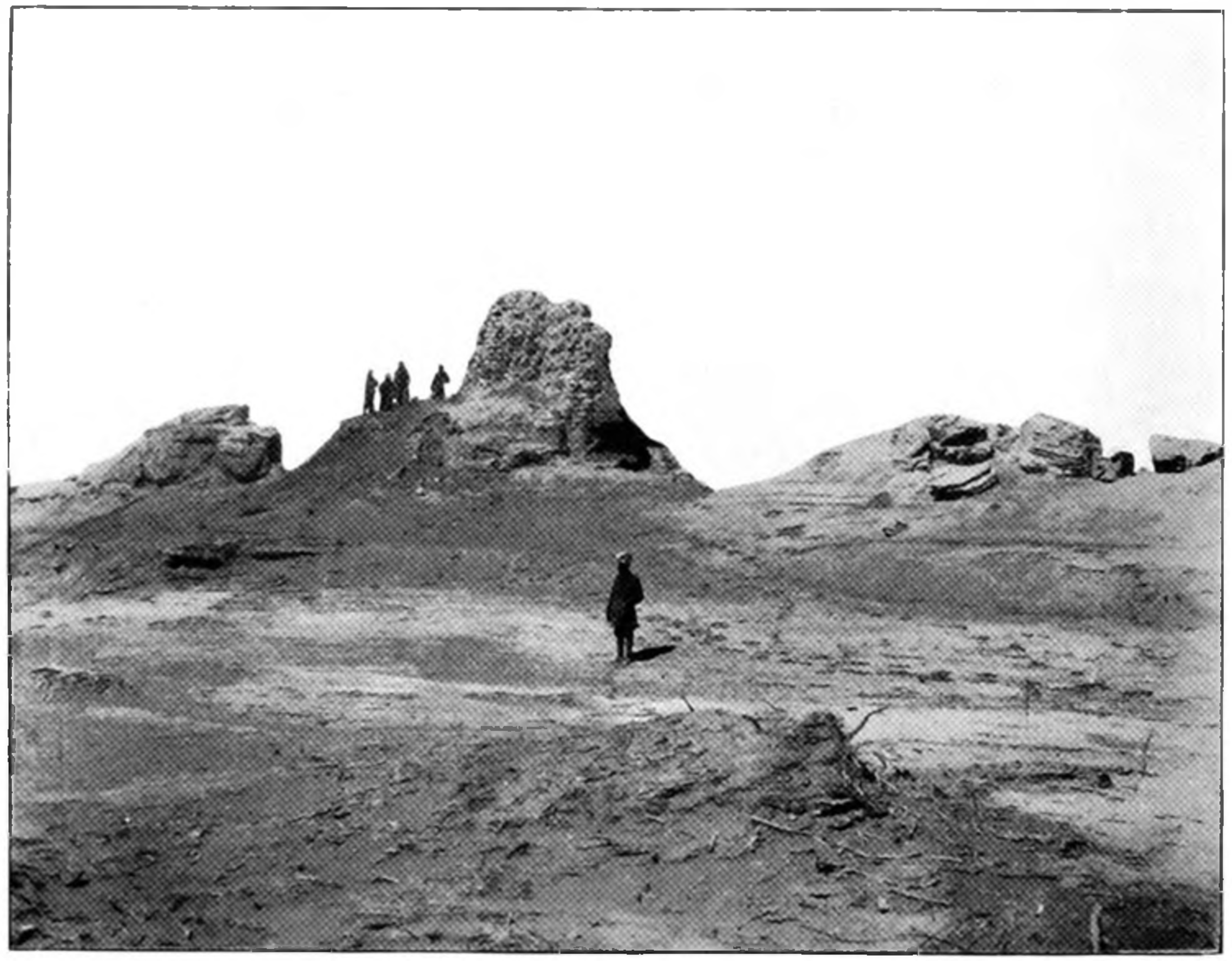
On the morning of March 28, with an icy gale blowing from the north, I directed our camp to be moved to the ruined tower T. XXVIII, which I had sighted on the previous evening on the south-west of, and next to, the one then so successfully prospected.[3] The position was convenient for following up the exploration of the other ruined towers sighted to the west. Moving ahead with every available man, I started the same morning the clearing of the thick layers of refuse which were very soon discovered on the south slope of the clay ridge occupied by T. XXVIII. Then, leaving the work to be continued under my assistants' supervision, I proceeded to reconnoitre the ruined towers just mentioned. But instead of describing the tasks as they were taken up and carried out in succession of time, it will be more convenient, for the reader as well as myself, if I record the results in the topographical order of the ruins. I propose to follow the same plan also in regard to other sections of the Limes which I was subsequently able to explore in detail. Such a treatment will make it easier to consider topographical features bearing on the Limes in conjunction with the archaeological facts revealed by its exploration.

Topographical order in description of ruins.

Ruined quarters of T. XXVII.

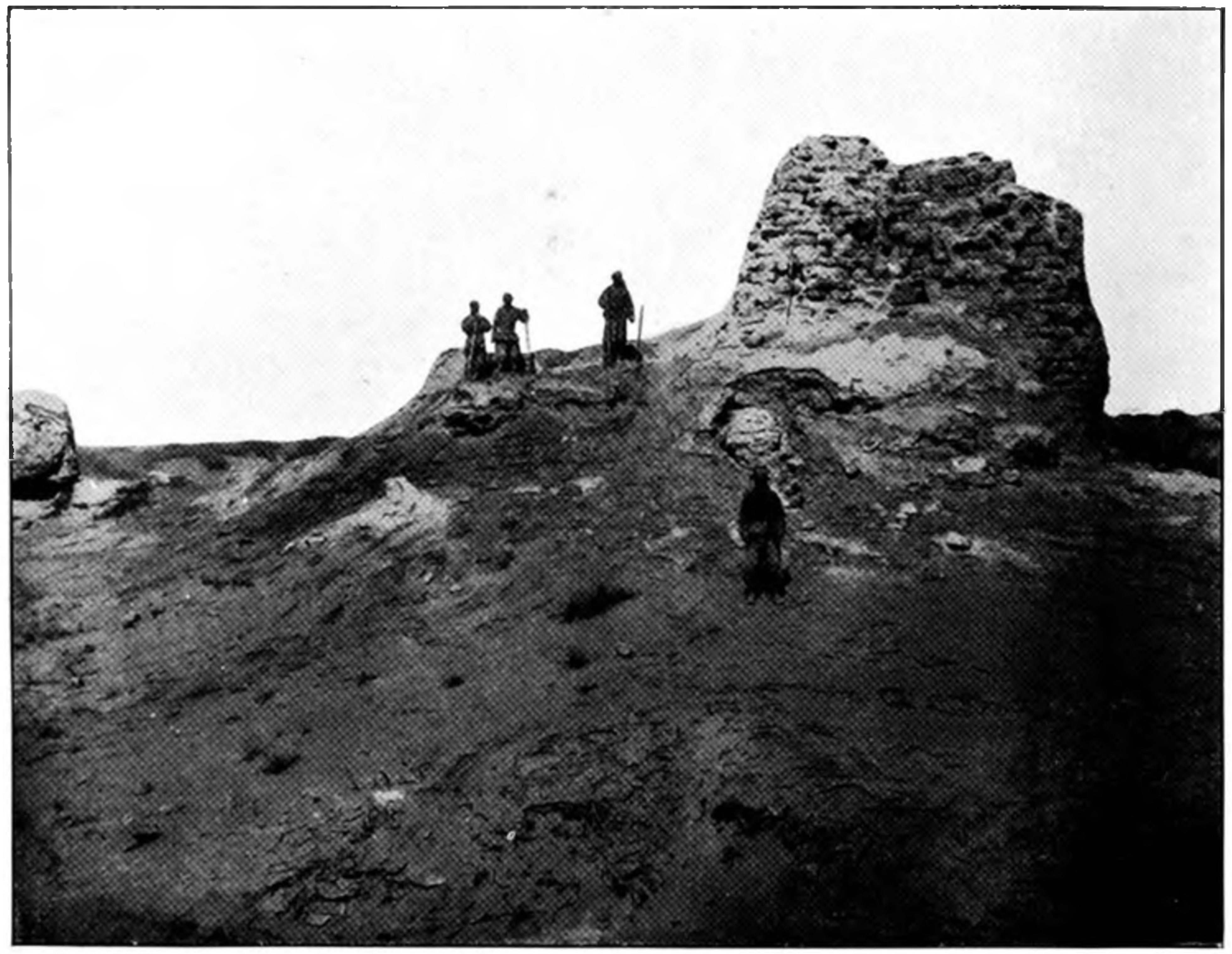
The complete clearing of the ruined watch-station T. XXVII did not disappoint the hopes which the first visit had raised. The débris lying by the tower on the west (Plate 34; Fig. 155) proved to belong to a room measuring fourteen feet from east to west and probably quite as much or more across. The north wall had completely disappeared through erosion. Those on the west and east were, at least in part, cut from the live clay of the narrow ridge occupied by the tower; but on the east side a brick-facing, ten inches thick, had been given. The south wall was three feet ten inches in thickness and entirely built of bricks which measured thirteen by seven inches, with a thickness of five inches. Through it led the entrance, three feet wide within, and narrowing to two feet three inches outside, evidently for the sake of greater protection. The floor of the room, when completely cleared of the refuse filling it to a height of over three feet, was found to occupy the same level as the lowest masonry course of the tower. Obviously the top of the ridge

[3] In Map No. 81. A. 3 the symbol to mark the position of Camp 164 at T. XXVIII has by an oversight been omitted.



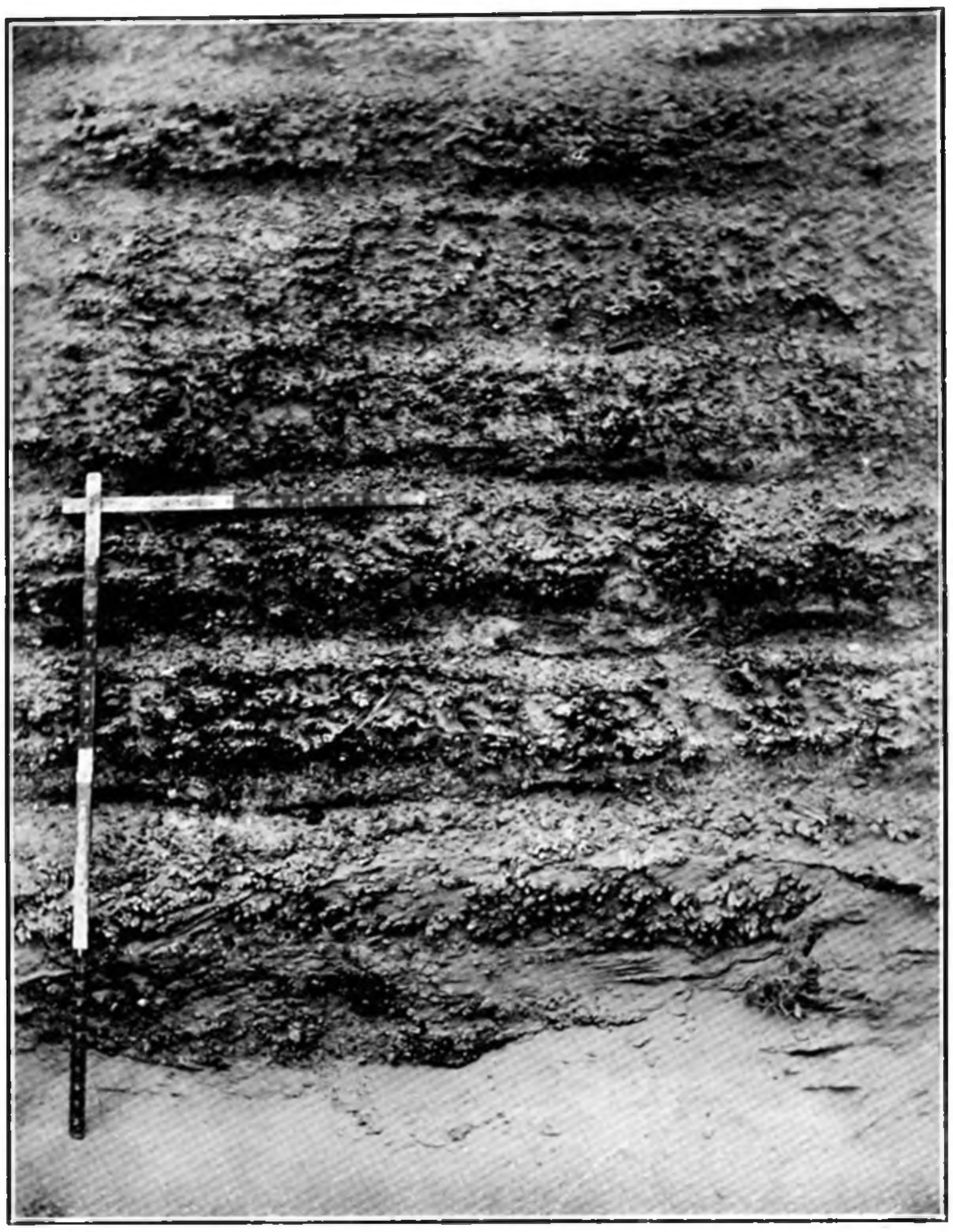
153. REMAINS OF ANCIENT WATCH-TOWER T. XXVII, TUN-HUANG LIMES, SEEN FROM SOUTH-EAST

154. RUIN OF ANCIENT WATCH-TOWER T. XXIX, TUN-HUANG LIMES, WITH LATER ENCLOSURE, SEEN FROM WEST.

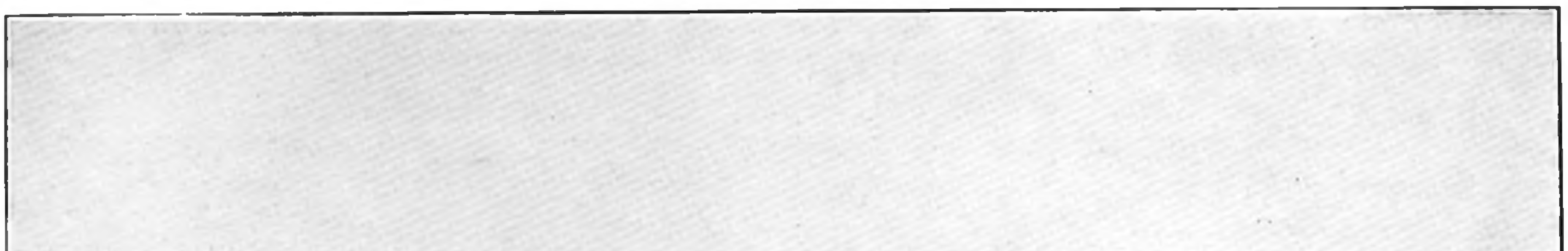


155. RUIN OF ANCIENT WATCH-TOWER T. XXVII, TUN-HUANG LIMES WITH REFUSE HEAPS IN FOREGROUND.

156. REMAINS OF WATCH-TOWER T. XXVIII, TUN-HUANG LIMES, WITH ANCIENT REFUSE IN COURSE OF EXCAVATION.



157. FACE OF ANCIENT BORDER WALL, EAST OF WATCH-TOWER T. XXXV, TUN-HUANG LIMES, SHOWING CONSTRUCTION WITH ALTERNATE LAYERS OF STAMPED CLAY AND FASCINES.



158. REMAINS OF ANCIENT BORDER WALL, BETWEEN LOW DUNES, EAST OF WATCH-TOWER T. XXXV, TUN-HUANG LIMES.

Surface of low gravel mound is marked by Chinese labourer standing on left.

had been cut down to some extent in order to provide a safe and adequately wide foundation for the tower. From this again it could be reasonably concluded that the general shape of the ridge must have been in Han times much the same as now. Nevertheless, the progress made by erosion was clearly indicated by the fact that both to the north and east the outer masonry of the tower had disappeared along with its clay foundation.

As seen from the plan and section, the original clay bank between tower and room had been left standing to a thickness of about three feet, and still survived to about the same height. In the south-east corner of the room there was found a low platform, six feet by two, in plaster, and facing it in the south-west corner a projecting post of brickwork which, judging from the blackened surface of the adjoining remnant of the wall, is likely to have served for lighting fires. The smoke, in accordance with common Chinese practice to this day, would be allowed to find its way outside through a hole in the roof. It was interesting to note that the entrance had been approached on the south by a kind of ramp, cut into the live clay and about three feet wide, leading up to a narrow terrace or landing in front of the entrance. This ramp could be traced down to a level about ten feet below that of the floor in the room, and this indicates the minimum extent of erosion which the ground adjoining the ridge must have undergone before Han times. The deepest point of the depression immediately to the south appeared now to lie about seventeen feet below the level of the floor and the base of the tower. But, of course, it is impossible to say exactly how much of this difference of seven feet is due to erosion subsequent to the erection of the watch-station. About twenty yards to the west of the foot of the tower there was found a small heap of millet straw with a piece of reed-matting, which had found shelter under the clay débris fallen from a small knob of the ridge and was lying on a level about six feet beneath the tower base. Being in all probability coeval with the occupation of the post, it makes it probable that the ridge even then had an irregular outline not very unlike that shown by Fig. 153.

Watch-tower built on clay ridge.

Depth of erosion.

It was in the refuse lying to a height of a foot or two above the landing previously mentioned outside the entrance that the first documents of T. XXVII had been found. The complete clearing brought to light in the same place over a dozen more inscribed slips, among them some intact and the rest either broken or mere shavings. To these were added seven more pieces, T. XXVII. 13–19, from the interior of the room. One of the new finds (now No. 562), as we recognized with much satisfaction on the spot, showed the clearly written date of the 11th year *Chien Wu*, corresponding to A. D. 35, and marked a further step back in antiquity. Another, No. 565 (*Doc.*, Plate XVI), in excellent preservation, furnished the date of A. D. 53. Thus the dates represented among the seventeen records from this ruin which M. Chavannes has included in his *Documents* as being decipherable (Nos. 562–78) are now proved to range over A. D. 35–61. Chiang Ssŭ-yeh felt sure that the great majority of them referred to military posts or individual officers, though he emphatically disclaimed any attempt to make out the details. So I could not fail to arrive at the conclusion, to which every archaeological fact also pointed, that the room by the side of the watch-tower had served for the accommodation of some officer or clerk attached to the troops that guarded this section of the Limes.

Discovery of Chinese records dated A.D. 35–61.

This conclusion has since been fully confirmed by M. Chavannes' decipherment and lucid interpretation of the documents. It would be supererogation and, indeed, of little practical utility if, on the basis of his exhaustive labours, I should attempt to review the records from the ancient Chinese Limes separately as they were found at each of the many sites along its far-flung line. I shall instead restrict myself, here and elsewhere, to a brief mention of such points attested by the documents as have a direct bearing on the date, locality, purpose, and similar features of each individual ruined structure. For a general synopsis of the data which M. Chavannes' unsurpassed

Chinese records discussed by M. Chavannes.

learning and critical acumen secured from the mass of very interesting but often exceptionally obscure records, I must refer to Chapter XX. Even that synopsis need be attempted only in so far as it may help to throw light on the history and general organization of the Limes and the daily life led along it.

Hsien-wei and *Yang-wei* companies of *Wan-sui.*

Among the records found at T. XXVII particular archaeological interest attaches to No. 569 (*Doc.*, Plate XVII), a neatly written wooden label with the string still attached, which had evidently been taken from a bundle containing a soldier's outfit. From M. Chavannes' translation we now know that it mentions 'a cuirass and a pair of shoes in leather belonging to the *Hsien-wei* company of *Wan-sui* 萬歲'. That the latter name was that of a locality, and in all probability of the part of the Limes comprising, among others, the watch-station at which the label was found, is proved by two other records, also from this ruin, which mention the *Yang-wei* company quartered at Wan-sui (*Doc.*, No. 568, Plate XVI) and the appointment of a certain officer 'under the orders of the commander of the post of Wan-sui' (*Doc.*, No. 574, Plate XVI). That the Yang-wei company guarded the neighbouring watch-station T. XXVIII in A. D. 75 is seen from No. 614. Three documents found at T. XXVII supply us with the names of other companies garrisoning this section of the Limes. In A. D. 35 it was the *An-t'ien* company (No. 562), in A. D. 50 the *An-han* company (*Doc.*, Nos. 563, 564; Plate XVI); in A. D. 53 the company called *Kao-wang* had succeeded (*ibid.* No. 565;). Wan-sui seems to have been connected in some way with 'the *Yi-ho* 宜禾 barrier'; but no exact indication of the position of the latter is furnished by the three records from this station (Nos. 567, 568, 572) which mention it.[4] Nor can the 'eastern section', of which No. 570 names a certain post commandant, be located at present.

Blank stationery, pottery, &c. at T. XXVII.

That the room by the side of the tower T. XXVII had seen a good deal of clerical activity was also proved by over a dozen blank slips of wood, T. XXVII. 0014, found here. Those that were complete were of the regulation size; many had become very thin, obviously by repeated paring after use. They, no doubt, belonged to the stock of wooden stationery kept ready at this little office. Finds of small miscellaneous objects, mostly fragmentary, were plentiful among the refuse lying within the room and strewing the slope outside. They are mentioned separately in the Descriptive List at the end of Chapter XX below. Apart from a small fragment of coloured porcelain, T. XXVII. 2 (Plate IV), which is likely to have been brought here in T'ang times or later, I may mention pieces of stoneware bowls, T. XXVII. I. 5, 0024, which, on account of their brownish or greyish glaze corresponding to that also found on pieces from other portions of the Limes line, may safely be ascribed to the Later Han period. But here, as at all stations of the line, potsherds of the dark-grey, mat-marked type were found in far greater abundance, though owing to their very commonness the specimens that I brought away were few.[5] Very frequently the rims had holes drilled in them for fastening up broken jars, etc., which, though no longer fit to hold liquids, would serve for keeping cereals and the like. The very coarseness of the fabric invests this practice with a special significance. Together with so many other indications, it helps to bring home to us the humble and penurious conditions in which the rank and file, if not the petty officers also, must have passed their days on this dreariest of desert borders.

Pottery repaired.

Ink-seals and miscellaneous finds.

Among several wooden ink-seals (T. XXVII. 003, 005–006) of a type also found at other stations I may mention one, T. XXVII. 15 (Plate LIII), as still retaining engraved on its bottom a Chinese character of ancient form, but as yet undetermined. Besides two wooden dice or counters, also

[4] Regarding a military district of the *Yi ho tu wei* in the Tun-huang command, also mentioned in the Former Han Annals, cf. M. Chavannes' note on No. 61, *Documents*, p. 26.

[5] This shortcoming of my first exploration has been made good by the numerous specimens of the common pottery types which I collected in 1914 along the whole Limes line from its western end to the Etsin-gol.

of a type represented elsewhere, T. XXVII. 007–008, two roughly-cut wooden pens, made of tamarisk twigs, T. XXVII. 0018–0019, throw some light on the occupations of those who were stationed here. Passing mention may be made of two wooden spoons, T. XXVII. 0015, 0017, and of a broom and a well-made piece of fibre string matting, T. XXVII. 0021, 0023 (Plate LIV). There is in T. XXVII. 0010 a specimen of those curious wooden pegs showing a roughly-drawn grotesque face, which turned up in numbers at different watch-stations, and of which the true purpose still remains to be determined (cf. Plate LII for other examples). The wooden fire-stick, T. XXVII. 0011, 'female' portion, is of interest as closely agreeing, in shape and arrangement of the holes, with the pieces found at the sites of Niya, Endere, and Lou-lan.[6]

Section IV.—SEARCH OF RUINED LIMES STATIONS T. XXVIII–XXX

Refuse-heaps at watch-tower T. XXVIII.

The tower T. XXVIII was found to be situated about one and a half miles to the south-west of that last described, and, like it, on a low clay ridge rising above eroded ground with scanty tamarisk growth. It proved to be very badly decayed, as seen in Fig. 156, and no exact measurement of its original ground-plan could be obtained. It is likely to have been, as usual, about twenty feet square at the base; the actual height was about thirteen feet and the material stamped clay, with thin layers of tamarisk brushwood at intervals of three to four inches. No other structural remains could be traced; but at first sight my eye caught thick layers of refuse covering the south slope of the ridge from about ten feet down to about twenty feet below the foundation of the tower. Their total width was close on thirty feet, and at the foot of the slope, where the refuse rested in horizontal strata on the natural soil of soft alluvial loess, it lay quite three to four feet high. Its position showed clearly that, at the time when the tower was built, the clay ridge must already have risen some twenty feet above the immediately surrounding ground and thus offered itself as a good look-out place to watch the riverine depression northward. This is likely to have been covered in ancient times, even more thickly, perhaps, than it now is, with tamarisk-cones and other growth of scrub, and thus to have needed close guarding. To this special feature of the ground I would ascribe the relatively short distances at which the watch-stations of this eastern section of the Tun-huang Limes were built, nowhere more than about one and a half miles, and in places only about one.[1]

Clearing of refuse layers.

The chief ingredients of the refuse were straw of reeds, twigs and bark of tamarisks, and dung of horses—obviously, in the main, stable refuse thrown down here from some watch-station forming a link in the long chain of posts which ran along the wall. But from the very edge of the top of the heap protruded the small but quite legible fragment of a Chinese slip (T. XXVIII. 1; *Doc.*, No. 647, Plate XVIII), and as soon as clearing was started, ancient records on wood cropped up in striking abundance. It proved, indeed, a precious rubbish-heap, and in the end the day's work which it cost us was rewarded with the discovery of over seventy pieces, of course mostly fragmentary. Out of the total M. Chavannes found forty-seven sufficiently legible for publication in his *Documents*.[2]

Ancient stationery on wood.

The variety of the miscellaneous correspondence and office 'papers'—for as such I could through Chiang Ssŭ-yeh's help safely recognize them—found here and at T. XXVII was sufficiently great to familiarize me on the spot with the main external aspects of this ancient Chinese stationery on wood. The most usual form was certainly the thin wooden slip measuring, as already stated, from 9 to $9\frac{1}{2}$ inches in length and from quarter to half an inch in width. The fact that there were complete slips containing up to thirty characters and more in a single vertical line (see e. g. T. XXVIII. 54;

[6] Cf. above, p. 233.

[1] As to the apparent exception between T. XXVI and T. XXVII, see below, p. 604.

[2] See *Documents, Série T. XXVIII*, pp. 135–41.

Doc., No. 614, Plate XVIII) illustrates the often remarkable neatness of the writing, and also the obvious desire to bring the whole of a communication or record on to a single slip. Sometimes, however, the writing was arranged in more than one column on the same face of the slip (see e. g. *Doc.* No. 682, Plate XIX), or continued on the back (e. g. *Doc.*, No. 563, Plate XVI). It is clear that there must have been cases when private letters or official documents—to say nothing of texts of books, etc.—required more than one slip for their record. As to the method used for keeping such a series arranged, some notes will be found below.[2a]

Materials, shapes of wooden stationery.

Among the woods used for the slips, that of the cultivated poplar (*Populus alba*) seemed by far the most frequent, just as it had been at the Niya and Lou-lan Sites. But, as I had already noticed at Lou-lan (see e. g. *Doc.*, Nos. 752, 754, Plate XXIII), there appeared also, as seen e. g. in *Doc.*, Nos. 607, 627, Plate XVIII, etc., a peculiarly streaked, soft wood which Naik Rām Singh, being a carpenter by inherited training, at once recognized as belonging to some conifer. It certainly could not have grown in a climate so arid as that of the lower Su-lo Ho basin must have been throughout historical times; of this the survival of the Limes remains is by itself conclusive evidence. The nearest and most likely district for its supply was on the north slopes of the western and central Nan-shan, where I subsequently found remnants of fir forest, still considerable in extent. An import from a far greater distance is represented by the neat slips of bamboo which turned up at other ruined stations of the Limes west of Tun-huang (see e. g. *Doc.*, Nos. 524–31, Plate XIV), and of which T. XXVIII. add., No. 645, was my first specimen on this ground. Additional variety was given to this ancient wooden stationery by the use of that abundant local material, the tamarisk. Among the finds of the refuse-heap at T. XXVIII it appeared in what might be called 'fancy' shapes, such as tamarisk sticks with several roughly-cut faces, e. g. Nos. 618, 629, 640, 644 (*Doc.*, Plate XVIII), or else with the bark left adhering in part, No. 641; the notched polygonal stick, No. 617 (*Doc.*, Plate XVIII); the peg-topped broad label, No. 616 (*ibid.*); the curious ladle-shaped piece, No. 628, etc. Clerical convention was evidently not so strict for personal communications between those stationed on the line as about official correspondence. For mere 'copy-writing', with which soldiers quartered at this and other stations seem often to have beguiled their time (see e. g. Nos. 641, 643), sticks of tamarisk cut on the spot were obviously good enough. Yet the supply of properly made wooden stationery clearly had its value, and for economy's sake it was used over and over again, as is shown by the number of 'shavings' from regular slips (e. g. *Doc.*, No. 649, Plate XVIII), and the fact that the slips have often been thinned by repeated paring.

Bamboo slips.

'Copy-writing' on wood.

Local names of *Wan-sui* and *T'un-hu.*

Turning to the contents of the documents found at T. XXVIII, I may note among points of local interest that the complete slip No. 614 (*Doc.*, Plate XVIII), dated in A. D. 75, mentions the *Yang-wei* company, which we have already come across at T. XXVII. Two men belonging to it are reported to have received and forwarded a letter brought by a mounted official from *Hsi-p'u* 西蒲, a place which is not otherwise mentioned, but which, considering the position of the post relative to the route towards Hāmi, might well have been situated in that direction outside the Limes. No. 613, also of A. D. 75, refers to the commandant of the watch-post of *Kao-wang*, a name which in a record of T. XXVII (No. 565) figures as that of a company stationed apparently in this neighbourhood in A. D. 53. The *Yang-wei* and *P'o-hu* companies are named in Nos. 620, 621, but without details which might help to determine their station. Of more interest to us is the polygonal notched stick No. 617, *Doc.*, Plate XVIII, on which is written a direction for the circulating, apparently of some order, 'to the commandants of observation posts and to the quarters of companies in the eastern and western sections of *Wan-sui* and in the eastern section of *T'un-hu* 呑胡'. The latter name is found also in Nos. 618, 619. Of Wan-sui we have seen above that it was probably the designation

[2a] See chap. XX. sec. vi.

of that tract on the Limes which comprised the neighbouring watch-station T. xxvii. *Tun-hu* may well have been the name of the part of the Limes adjoining Wan-sui on the west.

Seal-cases and miscellaneous finds from T. xxviii.

Of the wall itself no trace had survived here or at any other of the towers to the south-west of T. xxvi, a fact for which the character of the surface soil, with the consequent result of wind-erosion, is quite sufficient to account. Even the quarters sheltering those who had once kept watch by the tower had completely disappeared. Yet from the plentiful refuse thrown out by them it was possible to draw some conclusion as to the conditions of their life. Among the miscellaneous small objects found here and detailed in the Descriptive List, wooden articles such as spoons, rough combs, sticks of various sorts, and the like are the most common. Numerous, too, were small oblong wooden blocks, T. xxviii. c–g, k–n (Plate LIII), apparently intended to be made into dice or counters. Plate LIII shows also two ink-seals, T. xxviii. j, q, on which, however, the Chinese characters have become mostly effaced. Of particular interest are two wooden seal-cases, T. xxviii. a, b, evidently meant to be attached to some closed bag or other receptacle by means of a string passed across or through them. Their types are represented also by numerous specimens found at other points of the Limes, and have been fully described in the List, under T. viii. 5, as well as illustrated by specimens shown in Plate LIII. The special importance of the types to which the two seal-cases of T. xxviii belong lies in the fact that they show the same arrangement of three grooves for folds of string over which the seal was to be impressed in clay, as I had first discovered in 1901 on the envelopes of the Kharoṣṭhī documents brought to light at the Niya Site. These seal-cases supplied additional and conclusive proof that I had been justified before in tracing all such details of that ancient wooden stationery of the Tārīm Basin back to earlier Chinese models.[3]

Bronze arrow-heads of ammunition.

Among small metal objects I may single out for briefest notice the portion of a cast-iron hoe-blade, T. xxviii. 0018, an implement represented also elsewhere on the Limes (see T. xv. 009); the bronze buckle, T. xxviii. 0020; and the bronze arrow-heads, T. xxviii. 009–0012, specimens of the several modifications of the type which, as the abundant finds all along the Limes have proved, was prevalent in Han times. Its chief characteristic is the blade triangular in section, with each face slightly leaf-shaped and a hexagonal socketed shank; often one or more faces have small hollows. References to the entries where the various forms have been detailed will be found in the Descriptive List, and reproductions of different specimens in Plate LIII. The examination of the sub-types and their grouping with reference to the several classes of 'regulation' cross-bows, which are frequently mentioned in our documents as among the equipment of the various posts and small detachments guarding the Limes, would be a very interesting subject of inquiry; but it would fill a small monograph by itself.

Perforated pottery fragments.

T. xxviii. 1–3 are specimens of the dark-grey wheel-made pottery which, with or without 'mat-marked' outer surface, was found in abundance here, as at other watch-stations of the Limes, both amongst refuse and on the surface of the ground. I have already referred to the numerous fragments which showed perforations on the edges with regular drilled holes. Here the discovery in the rubbish-heap of several pieces still actually reunited by a cord-fastening, of which T. xxviii. 2 (Plate LII) is a specimen, conclusively explained these perforations. The practice bears witness to the value which the quondam owners had attached to their pots and jars, however badly damaged. Indirectly it also serves to show the remoteness of the guarded line of the wall from the inhabited area at this and most other points of the Tun-huang Limes. As the material was of the coarsest, and hence, no doubt, cheap enough, only the difficulty of transporting the larger earthenware from the oasis would account for this continued use after the roughest mending. Yet two small pieces of

[3] Cf. *Ancient Khotan*, i. pp. 361 sq.; also above, p. 382.

silk, T. xxviii. 0021, one of a fine muslin-like texture, showed that, in spite of such obvious marks of penury affecting the rank and file, the refinements of life were not altogether absent at such stations.

Clay terrace marking watch-post.

On proceeding from T. xxviii towards the next tower on the south-west I noticed, at a little over half a mile's distance, a clay ridge about fifty yards long and twelve feet in height, bearing near its centre a knoll about ten feet high, which at first suggested the remnant of a ruined tower. It proved to be only a natural clay 'witness' with no trace of structural remains. Yet on the top of the ridge potsherds of the dark-grey wheel-made kind previously described, together with fragments of animal bones, lay in such abundance that occupation during the period when the Limes was guarded appears very probable. The natural clay terrace, even without a tower, would supply a convenient position for a subsidiary look-out post, as I subsequently found in the case of a number of stations near the Khara-nōr. The tamarisk-cones extending along the line marked by the towers became from here onwards more scattered and fell to only four or five feet in height. At last they disappeared altogether beyond the ruined station T. xxix, reached after another three-quarters of a mile.

Watch-tower T. xxix.

Here, too, the tower, as seen in Fig. 154, had been built on a small clay ridge, no such advantage of ground being ever neglected by those who constructed the 'Wall'. It was built with layers of stamped clay, each from three to four inches thick, on a base about twenty-one feet square, and rose in fair preservation to a height of over twenty feet. Tamarisk brushwood inserted between the successive layers attested the antiquity of the original structure, but the remains of a parapet, built of rough bricks and still about five feet in height, seemed to prove that it must have been repaired at some later time. Closer examination of the top was impracticable, as there was no trace of stairs apart from some holes on the south face which may once have served as footholds.

Later enclosure of T. xxix.

The impression of an ancient Limes tower that had been put to later use was distinctly strengthened by the presence of a relatively well-preserved enclosure, about 107 feet square, of which the tower itself formed the north-west corner, as seen in the plan (Plate 34). The walls of this enclosure, constructed of rough bricks and lumps of hard clay and strengthened by layers of tamarisk brushwood at intervals of about fifteen inches, bore a manifestly later look (see Fig. 154), and at the south-east corner still rose to a height of nearly eight feet. Within this corner were traced foundations of brick walls belonging to a couple of rooms that had been built against the east wall. The bricks here measured thirteen by seven and a half inches with a thickness of five inches; they were laid in alternate courses five and seven and a half inches high respectively. The thick accumulations of refuse found above these remains yielded nothing but plentiful reed straw, burnt brushwood, and droppings of horses and camels. Similar deposits, affording no chronological clue, also made up a large refuse-heap that was found about ten yards outside the south-west corner. But here we came, quite close to the surface, upon a large pottery jar, intact up to the neck and about a foot high, T. xxix. 0013 (Plate IV). Its surface seemed to have been coloured by oil. The piece of coarse goat's hair fabric, T. xxix. 009, was also found here.

Finds of later keramic ware.

Definite evidence of later occupation, such as the structural indications just noticed had suggested to me from the first, has been furnished by the small pieces of fine keramic ware, with highly glazed surface, which were picked up in plenty both within and around the enclosure. The careful examination which Mr. R. L. Hobson, of the British Museum, was kind enough to make of the specimens brought away (see T. xxix. a–m. in Descriptive List, Chap. XX. sec. vii), has established the fact that, besides glazed stoneware pieces which he would attribute partly to T'ang and partly to Sung times, there are among them also fragments of porcelainous ware

(T. XXIX. k, l. 12) and two of undoubted Chinese porcelain (T. XXIX. i, j). As the latter is definitely known to have first made its appearance among the keramic products of China at the beginning of the Sung period (A.D. 963),[4] occupation of the site, continued or intermittent, down to that period, and possibly even later, may now be considered as proved. The glazes of the stoneware pieces vary greatly, including a number of fine colours, such as black, creamy, greenish turquoise, brown, etc., some with minutely crackled surface, as well as several mottled tints.

The presence here of later keramic débris, the first I had come across on this ground, helps towards the approximate dating of the sculptured remains which were brought to light by the clearing of a small ruined structure about fifty-two yards to the west of the south-west corner of the enclosure. It proved to be a little shrine, measuring only nine feet by eleven inside and having its completely broken entrance on the narrower side to the south. The walls, preserved elsewhere to a height of four or five feet, were twenty inches in thickness and built with fairly hard bricks of two sizes, one twelve by seven and a half inches with a thickness of five inches, the other twelve by six inches and three inches thick. Débris of broken bricks, reed wattle, and partially charred timber filled the interior. This was mainly occupied by a brick-built platform, four feet broad to the north and three feet elsewhere, running all round it except at the entrance on the south. Numerous fragments of stucco sculpture, found mainly in the débris covering the platform along the north wall, left no doubt that the little ruin had been a Buddhist shrine. **Ruin of small Buddhist shrine.**

The fragments, T. XXIX. 002–0012, though all badly broken, are of unusually hard clay which, as the darkened colour of the surface and the partially charred wooden core in the larger pieces suggest, probably owes this quality to accidental firing in a conflagration. They comprise hands (003) and portions of arms (0012. a, b) probably from more than one relievo figure, life-size or somewhat smaller, together with miscellaneous pieces of fingers, drapery, and ornaments. The details of the modelling and appliqué decoration show close dependence on the models of Graeco-Buddhist art. Considering the very conservative development of this Buddhist art on Chinese soil, and also the present inadequacy of our chronological knowledge concerning it, I do not think it safe to attempt any very accurate dating. But, with this reservation, I should be inclined to attribute these remains to a period not later than T'ang times. Instructive and interesting in this respect is the fragment, T. XXIX. 002 (Plate CXXXIX), which has two small heads, one above the other, each only about three inches high, but very carefully modelled. The look of placid contemplation in the upper head and the intense anger and passion in the lower one, with its frowning brows and eyes and mouth wide open, are very cleverly expressed. As a third head is evidently missing below, it is probable that a 'Trimūrti' representation of some Buddhist divinity was intended. We may trace a certain resemblance in style to the small naturalistically treated relievo heads recovered in numbers from the ruins of 'Ming-oi' in the Karashahr district (cf. Plates CXXXII, CXXXIII).[4a] **Remains of stucco sculptures.**

It is clear that the remains of the small Buddhist shrine here uncovered must have had some relation to the watch-station close by and the wall which passed it. That they belong to a period much later than the construction and maintenance of the wall is equally certain. The question was how to account for their presence at a point of the Limes which, as proved by the dated records found at T. XXVII, XXVIII, must have already been abandoned during the Later Han period, or at least soon after. The same question obviously arose as regards the fragments of keramic products of manifestly later origin found within and outside the enclosure adjoining T. XXIX. From the first there presented itself the conjectural explanation that it was probably the tenacity of local worship—such as I had so often seen exemplified elsewhere, and last among the ruins of Shih-pan-tung—which had here caused a small shrine to be maintained and restored centuries after the wall was **Later origin of shrine.**

[4] Cf. Brinkley, *China, its History, Art*, etc., ix. p. 12.

[4a] See below, chap. XXIX. sec. iii.

abandoned. This explanation has since received support from a variety of corresponding observations made elsewhere 'within the barrier' (*kuan nei-t'ou*), as the modern Chinese expression would have it, which I shall have occasion to mention.

Shrine on route from Tun-huang to Hāmi.

But the essential proof of its correctness lies in a local fact which I soon discovered. It is that the direct route from the Tun-huang oasis to Hāmi and the other oases along the T'ien-shan passes even now quite close to T. xxix. On my way back to Tun-huang from Camp 166 I actually followed this route, marked by a deep-cut cart track, which leads past T. xxix at a distance of scarcely more than half a mile to the west and then passes close to the foot of the clay ridge bearing the tower T. xxx.[5] Now, if we assume that in ancient times the important route to Hāmi already crossed the line of the wall here—and unchanging topographical facts distinctly justify this assumption—the existence of a small shrine near the gate station located at T. xxix, and its continued maintenance by pious wayfarers down to T'ang times or later, are easily accounted for. So is also the continued use by travellers of any shelter that the enclosure adjoining the ancient tower T. xxix provided.

Local cult at ancient Limes gates.

An exact and striking parallel is supplied by my subsequent discovery of the existence of a similar cult in T'ang times at the ruined Limes station T. xiv, which, as we shall see, represents the famous ancient frontier 'gate' of *Yü-mên*, the 'Jade Gate', leading to the west, and of its continuance at a quite modern shrine close by.[6] Another parallel, supplied by a shrine still actually 'in being' at the very point where the Limes line was crossed by the route leading from old Kua-chou to Hāmi, will have to be discussed in the chapter dealing with the remains in the An-hsi region.[7] For the pious customs which are observed to this day by those who pass 'outside the barrier' (*kuan wai-t'ou*) at the well-known gate station of *Chia-yü kuan* of the modern 'Chinese wall' west of Su-chou, and which are likely to be but a faithful reflex of those once prevailing at the 'Gates' of the ancient Limes, I may also refer to a later chapter.[8] My explorations of 1914 along the Limes line from An-hsi to the Etsin-gol have since familiarized me even more with the fact that practically every point where a route passes outside the line of the ancient wall is marked either by a ruined shrine or by one at which worship still lingers to this day.[9]

Continued local worship.

In reality I had not to go far from T. xxix in order to find evidence of the same old local worship still continuing to the present day, though at the time I did not realize its true import. When proceeding from there to the south-west, towards the next and last tower visible on that side, T. xxx, about a mile and three-quarters distant across an open salt-encrusted plain, I noticed about half-way a few rough enclosures built with lumps of salt-impregnated clay and obviously intended as shelters against the piercing winds. The Hāmi cart-track, already mentioned, passed between them. In the middle of one rose a miniature chapel, half-ruined, built of the same coarse material. Looking back in the light of the abundant indications since noticed, I feel assured that this modest substitute for a shrine, manifestly of quite recent construction, represents the last lingering trace of the cult which those leaving or regaining the border wall of the Empire were once accustomed to pay at the little

[5] The direction of this Tun-huang–Hāmi route is accurately indicated in Captain Roborovsky's map. It passes T. xxx, which is marked by the entry of a 'ruined tower' in his map, and subsequently is shown as crossing the Su-lo Ho to a group of buildings marked by a Chinese name in Russian transcription, apparently representing *Lao-ch'üan-tzŭ*. The position is identical with that of the *Ruined buildings* in our Map No. 81. A. 2.

An alternative track, leading further east and implying a considerable détour, was followed by Roborovsky in August, 1895, when the floods of the Su-lo Ho evidently made the main road impracticable. This track also passed T. xxx, and subsequently approached the Limes line again in the vicinity of T. xxxi–xxxiv, which his map marks by the entry 'ruins'.

[6] See below, chap. xix. sec. i, iii.

[7] Cf. chap. xxvi. sec. ii.

[8] Cf. below, chap. xix. sec. iii.

[9] A record of these instances must be left for my hoped-for publication on my third journey. Here a reference to the temple still maintained at the ruined frontier station of Ch'iao-wan-ch'êng on the Su-lo Ho (Map No. 83. D. 2) will suffice.

sanctuary of the 'Gate' by the ruined station T. XXIX. Local worship dies hard—in China quite as much as elsewhere.

Western-most watch-tower, T. XXX.

T. XXX, the westernmost tower I could trace on this part of the Limes, proved to be a square mass of stamped clay, rising to about fifteen feet in height, but too badly decayed through erosion to permit of exact measurement at the base, which is likely, however, to have been, as usual, a square of approximately twenty feet. Raised on a small clay terrace, about twelve feet high, it made a conspicuous landmark on the dismal *shōr*-covered flat. Apart from potsherds of the hard dark-grey kind described above, no ancient remains of any sort could be found. Neither of the wall nor of other ancient buildings could traces be expected to survive on such ground, where wind-erosion above, and salt moisture below, the soil had full scope for destruction. Though the view from the top of the terrace was quite open, no other ruin could be sighted to the west, except the tower T. XXIV already examined on my way north of Shih-pan-tung. It just showed its top above a maze of erosion terraces. I was unable to spare time to search the ground westwards for remains of the Limes. But I am inclined to believe that its line may well have run in the direction of Shih-pan-tung and then, after crossing the Tang Ho delta, have joined on to the section of the wall which I traced in 1914 for some distance to the south-east of the Khara-nōr.

SECTION V.—SURVEY OF LIMES LINE TOWARDS AN-HSI, T. XXXI–XXXV

Topography of N.E. Limes section.

Before turning to the remains of the wall explored north-eastwards, a few remarks on the general topography of the ground along this section of the Limes may conveniently find a place here. Looking from T. XXX to the south and east, I could see a belt of absolutely bare salt-encrusted soil extending far away. Such scattered old tamarisk-cones as rose above it to heights of eight to ten feet had long ago been completely cleared of their dead wood. I crossed this belt on my return march to Tun-huang, and found, as I expected, that its abundant salt-crust was probably the result of the overflow, or 'spill', from the eastern canals of the oasis which is allowed to empty itself over this area. Compared with the ground marked by clay ridges, and from T. XXVI eastwards by gravel 'Sai', which the line of the Limes follows, this *shōr*-covered belt seemed to form a shallow but distinct depression. This observation has been confirmed by the experience of the ground further east, gained in April, 1914, when, starting from Ko-ta-ching (Map No. 81. A. 4),[1] I set out to strike the Limes to the north-north-east and on my way to it had to cross a wide depression of salt marsh, which at that season proved almost impassable.

Marshy depression south of Limes line.

I have thus been led to conclude that there extends from east to west a long stretch of low ground, water-logged for a great part of the year and salt-covered bog for the rest, which occupies a large portion of the area shown in Map No. 81. A–C. 3. It runs parallel to the relatively narrow belt of higher ground over which the Limes wall was carried between Tun-huang and An-hsi, and lies to the south of it. This raised belt stretches itself parallel to the Su-lo Ho bed with its riverine marshes and divides it from the southern depression. To the west of T. XXVI it has, as we have seen, a surface of alluvial clay which retains steppe vegetation but is, all the same, undergoing wind-erosion, as shown by the low clay ridges on which the Limes stations were invariably built here. East of T. XXVI the surface changes to that of a low gravel plateau, flanked on the south by a zone of drift-sand, which again forms the edge of the marshy depression already mentioned. With the geographical explanation of the latter we are not concerned here. But I may mention in passing that its marshes appear to be fed on the east and west by the 'spillage' of the canals of An-hsi and Tun-huang respectively, and in the centre by the floods which the torrent-beds crossed on the high road between those oases occasionally carry down from the outermost ranges of the Nan-shan.[1a]

[1] The *Lo-ta-ching* of the map is a misreading.

[1a] See also below, chap. XXV. sec. i.

Desert ground crossed by Limes.

This rapid survey of the ground between Tun-huang and An-hsi will suffice to prove that, here as elsewhere, those who laid down the line of the ancient Chinese Limes well knew how to turn to account any advantage that could be secured from the natural configuration. By running their line on the belt of rising ground they kept the wall well above the inundation level of the spring and summer floods, and yet sufficiently close to the river to secure access to water from wells or other supply. At the same time a sufficiency of scrub and reeds was assured for grazing and fuel. But it is equally certain that the whole of this Limes line from Tun-huang to An-hsi or Kua-chou, as the oasis was called until long after its construction, lay through desert ground. In ancient times, just as now, no cultivation was possible along it or anywhere near it, until a point was reached, about fifteen miles west of An-hsi 'town', to which water could be carried by the canals of the An-hsi oasis.

Line of wall east of T. XXVI.

On the morning of March 31, when the thermometer still showed a minimum temperature of 39 degrees Fahr. below freezing-point, I proceeded from T. XXVIII to explore the line of towers eastwards. On the eroded ground between T. XXVII and T. XXVI I searched again for remains of an intermediate tower, such as in view of the distance intervening, over two and a half miles, is likely to have stood here, but in vain. As soon as the gravel-covered plateau was regained near the tower T. XXVI, where the first wooden records had been found, the wall could be traced unbroken for about six miles. There was here no need even of taking the direction from the four towers which still rose high along this stretch and had already been sighted from a distance. So clearly the line of the wall showed itself above the uniform expanse of bare gravel, both in the straight curtains between the towers and in the bastion-like semi-lunes by which the line curved round to the north of each tower. In some places, the alternating layers of brushwood fascines and gravelly clay still rose to three feet or thereabouts; in others, erosion had almost reduced the *agger* to the ground level. But even there the layer of thick tamarisk branches used for a foundation was quite distinctly seen emerging on either side of the low gravel-covered swelling.

Wall line parallel to wind direction.

The general bearing of the line was from east-north-east to west-south-west, as seen in the map. It is parallel to the direction of the strongest of the winds which in this dreary desert couloir rarely cease blowing for long and are particularly violent in the spring, and there could be no doubt that it had helped much to preserve the unbroken stretch of wall. Yet the wall was not absolutely straight over the whole of it, the towers not being placed exactly on one line, but with slight variations of bearing. Thus from the foot of T. XXVI the next four towers could be seen at the same time. As these slight deviations could not be due to any reason connected with the ground, the configuration being the same throughout, the idea suggests itself that they were intended, perhaps, to facilitate the simultaneous observation of fire-signals and the like on a number of these watch-towers. The distances between the towers also varied, from about three-quarters of a mile (T. XXXIV to T. XXXV) to over one and a quarter miles (between T. XXVI and T. XXXI). The ground to the north was everywhere an absolutely bare gravel flat, and for a distance of at least two miles could be watched even from the level of the wall with ease.

Watch-towers T. XXXI, XXXII.

The towers were all uniformly built of layers of stamped clay, usually four to five inches thick, with tamarisk brushwood between them. The base appears to have been always about twenty feet square, but it could not be exactly measured in each case as the state of preservation differed, the effects of erosion becoming more marked towards the east. T. XXXI still rose in a fair state to a height of twenty-six feet. Among slight débris on its east side, probably marking the position of a small hut, there was found a pentagonal stick (*Doc.*, No. 704). The Chinese characters on four of its faces still await interpretation. Near the tower, too, was found the small bronze arrow-head T. XXXI. 001, with the usual triangular blade of Han type (Plate LIII). The next tower,

T. XXXII, did not stand to the same height, but the bastion-like projection of the wall in front of it was particularly well marked here. The distance of the wall northward was twenty-six feet, to east and west fifty-six and thirty-three feet respectively. A rubbish deposit, probably from some quarters once adjoining the tower but now completely eroded, only yielded a few wooden relics, among them a rough pen, T. XXXII. 002, a hemp string, and the like. The bronze arrow-head T. XXXII. 009 was picked up on the surface at the north foot of the tower.

Ruins of T. XXXIII–XXXV.

Close on the south of the tower T. XXXIII was an enclosure about thirty-five feet square, built with lumps of clay and layers of tamarisk brushwood. Though salt-impregnation had made its wall almost as hard as concrete, erosion had reduced its height to a maximum of about two feet, and in places had completely effaced it. Apart from the droppings of horses nothing was found within or near the enclosure. T. XXXIV proved to be a tower much injured by wind-erosion, which had reduced its solid clay masonry to about sixteen feet from north to south and about twelve feet across. The base had been undercut by erosion, and a big fissure ran down through the clay, which nevertheless still rose to a height of seventeen feet. A low heap of débris about twenty feet to the east contained the foundation of a clay wall about fifteen inches thick, together with broken bricks and bundles of reeds, possibly from a roofing. Here was found the well-preserved wooden label, No. 705 (*Doc.*, Plate XIX), which apparently mentions the silk string for a particular type of cross-bow as belonging to a certain company raised, as its name shows, under the Han dynasty. Besides some other small wooden relics this heap yielded the large fire-stick ('female'), T. XXXIV. 001 (Plate LII), and the elaborately cut block, T. XXXIV. 003 (Plate LIV), the use of which has not been determined. In the débris, and about two feet above the natural soil, there turned up a copper coin of the *Wu-chu* type attributed to the first–second century A. D. Of T. XXXV nothing remained but a low mound which only contained disintegrated red clay and ashes, evidence of some structure destroyed by fire. That this had been a watch-tower is made practically certain by the bastion-like semi-lunar projection which the line of the wall makes north of it, just as in the case of the towers previously examined.

Well-preserved stretch of wall.

Half a mile to the east of this last tower the wall became lost amidst dunes of drift-sand that rose up to fifteen feet in height and were evidently the offshoot of a sand belt encroaching from the south. Further on, it again emerged in patches. After having thus tracked it for about two miles from T. XXXV, I reached a broad belt of gravel, fringed by dunes both on the north and on the south, and found there a remarkably preserved stretch of wall, quite unbroken for 256 yards and rising in places to a height of fully seven feet (Fig. 158). It seems probable that its preservation in this fair state had once been aided largely by the protection of a high cover of sand, though now the drift heaped up against it lay only three to five feet high above its foundation. The uniform distribution of the sand on either side showed that the direction of the wall, east-north-east to west-south-west as before, was also that of the strongest among the prevailing winds. In fact, without this direction the wall could not have survived at all on the bare, level ground fully exposed to the erosive action of the winds.

Solid construction of wall.

In the centre of this stretch the wall had a remarkably solid appearance. Its sides showed scarcely any trace of erosion, except that they had lost the revetment of fascines laid horizontally in the direction of the wall which they are likely once to have possessed. Otherwise the particular method of construction could be studied with ease. As shown quite clearly by Fig. 157, layers of fascines, about six inches thick, made up of mixed tamarisk twigs and reeds, alternated with strata, three to four inches thick, of coarse clay and gravel from the soil on the spot. Where the photograph of Fig. 157 was taken, I counted eight double layers of fascines and stamped clay, making up a total height of a little over seven feet. I noticed that, while the fascines were mainly made up of tamarisk

brushwood, reeds prevailed on the top of each layer. This suggested that they had been specially inserted there in order to provide a more level surface for the succeeding stratum of clay and gravel. From the solid regularity and neatness of the whole it may be inferred with considerable probability that the successive layers of this *pisé* had been systematically stamped within boarded forms, after the fashion still practised by Chinese and others in the dry Central-Asian regions. Water was in any case necessary for the construction, and must have been brought from the nearest lagoon or branch of the Su-lo Ho.

Dimensions and materials of wall.

The thickness of the wall as actually measured across the top was over six and a half feet; it was apparently about one foot more at the base, allowance having to be made for the attrition which the uppermost layer of fascines had suffered on its edges through erosion. As both faces of the wall were practically vertical, its thickness must have been at first uniform throughout. That its original height was much greater may be considered certain; for, as subsequently noted, I found it still actually rising to over ten feet near T. XII, a tower on the Limes westwards. To this strangely built wall the salts contained everywhere, then as now, in the soil, the marshy water, and the desert vegetation had given a quasi-petrified consistency; their presence was attested in the wall itself and in all its materials by abundant salt efflorescence. Yet the fibrous reeds, when detached, and to a minor extent also the tamarisk twigs, still retained much of their natural flexibility.

Technical skill of wall construction.

To the pliant tenacity of this material, apparently so frail, it was mainly due that the wall had succeeded in withstanding for so long that most powerful of the forces which nature or man could bring against it in this desert region—slow-grinding but incessant wind-erosion. As I looked at it here rising before me, still solid with a strength upon which even modern field-artillery could probably make but little impression, I was more than ever struck by the skill with which those old Chinese engineers had not merely laid down their line, but also improvised its rampart. My subsequent explorations westwards, and those, too, by which in 1914 I traced the Limes far away to the east, have only tended to increase my respect for their remarkable exploits. Across a desert area extending over hundreds of miles, bare of all resources, and in most parts even of water, it must have been a most difficult task to construct so solid a wall as this. Merely to provide and maintain the labour for it required organizing powers of no small order. That in view of the magnitude of the enterprise the materials for construction had to be sought exclusively on the spot is obvious. But it illustrates the remarkable technical intelligence and adaptability of those who directed the enterprise that, hurried as the work of safeguarding the newly gained line must have been, they chose the materials and methods which, though of little apparent strength, were yet those best adapted to local conditions and most likely to make the achievement last for ages. I much doubt whether any others that they could have commanded, then or now, would have stood better the stress of two thousand years and the constant onset of eroding forces.

Difficulties of material and labour.

March north to Su-lo Ho bed.

For another mile and a half I continued the march among low sand-dunes without coming upon any further traces of the wall or sighting any more towers, though the view was open enough. I was forced to conclude that on this particular stretch of ground erosion had succeeded in its work of effacement. This has been confirmed by my experience of April, 1914, when, returning to the neighbourhood of this ground from the south under more favourable conditions, I had considerable difficulty in tracking the line again. On the previous occasion regard for our animals in need of water and grazing obliged me to break off the search and to turn northward to the river. It was reached after a march of over seven miles, crossing in succession a belt of absolutely sterile gravel, a dry river-bed with wild poplars still alive, a zone with dead tamarisk scrub, where a well-marked cart-track coming from An-hsi was encountered, and finally a belt of live riverine jungle containing the deep-cut bed of the Su-lo Ho. The volume of water that it carried at the time amounted, on

the basis of the measurements I was able to make, to at least 4,000 cubic feet per second, if not more. But the wide marshy belt within sight to the west showed clearly that none of this water could possibly be utilized for cultivation.

Return from Limes to Tun-Huang.

Overnight the wind increased to a Burān, this time from the west, and the consequent murky condition of the atmosphere for some days left no chance of a further search for the Limes line eastwards. The town of An-hsi, to which it would have carried me, I was in any case bound to visit later. So I decided for an early return to Tun-huang in order to spare time for the explorations awaiting me on the west. The main object which had prompted this expedition to the north-east was already secured. It had proved that the remains of the ancient wall actually continued east of Tun-huang, as I had conjectured from the first. In addition, I now carried back indisputable evidence in the shape of exactly dated records proving the occupation of this Limes in the first century A. D. The trying experiences undergone on the three days' march back to Tun-huang town, first along the wall and then via T. xxx and Shih-tsao, amidst icy gales and driving sand, have been described in my Personal Narrative, and need not be told here again. They made me realize fully the life led by those who once guarded this desert border. On April 3 my old camping-place was regained.

CHAPTER XVI

THE OASIS OF NAN-HU AND THE YANG BARRIER

Section I.—REMAINS BETWEEN TUN-HUANG AND NAN-HU

Help for desert campaign westwards.

Regard for the tasks ahead made me restrict my halt at Tun-huang to a single day, April 4, 1907. Considering the manifold preparations needed for my main campaign in the desert westwards, this could not possibly have sufficed, if the opportune arrival of circular instructions from the Viceroy at Lan-chou, recommending me and my researches to all authorities of westernmost Kan-su, had not stimulated my official friends at Tun-huang to increased efforts to help me in overcoming the local *vis inertiae*. At the same time I was glad to note the genuine scholarly interest which my discovery of dated Han records had aroused in the learned magistrate Wang Ta-lao-yeh. With his ready support—and by using the incentive of high rates for all payments—I managed somehow to raise a month's supplies, twelve fresh labourers, additional camels for transport, and also as many 'Ketmans', those excellent implements of the Turkestān excavator, as could be secured among the Muhammadan refugees at Tun-huang.

Ruined walls of *Sha-chou* town.

The route I proposed to follow was first to take me south-west along the edge of the foot-hills to Nan-hu, a small oasis where I knew, from Zahīd Bēg's information and Captain Roborovsky's map, of the existence of ruins. Moving due north from Nan-hu, I would strike the line of the western Limes near its middle, and survey new ground *en route*. The first march, on April 5, was short, and left time also for a rapid examination of the 'old town' (*chiu ch'êng*), the crumbling clay walls of which face the present town of Tun-huang at about a mile's distance to the west of the Tang Ho. The site was said to mark the position of the *Sha-chou* of T'ang times, but it is now completely abandoned to fields and gardens. I was unable to discover any reliable tradition as to the date at which this town was deserted; but the liability of the site to inundation from the river was said to have been the cause of it. That the place must have ceased to be occupied long before the Tungan rebellion was clearly proved by the total absence within the circumvallation of any structural remains above ground. That no such remains could have survived below the soil was made obvious by the swampy condition of the fields. The enclosing walls, completely ruined in places, formed a duly orientated rectangle, measuring about 1,485 yards from north to south and 650 yards across. They were built throughout of solid layers of clay, about four inches thick, and at the south-east corner still rose in fair preservation to a height of about twenty feet. The distance thence to the west bank of the river bed was only some 150 yards. One gate on the south and two on the west face were traceable. A tower defending the north-west corner was still about forty feet high. A comparison with the walls of the present town, which form a square of about 1,100 yards, shows that the area enclosed within the old *ch'êng* was slightly smaller.

Ruins of Chên-fan-hsien.

Thence the route turned off to the south-west and, passing several large and well-kept temples, brought me to the edge of present cultivation on this side after a little over three miles. Here the ruins of a smaller walled town, known as *Chên-fan-hsien* and said to have been the seat of a separate *hsien* or magistrate in pre-rebellion times, served to recall again the havoc wrought by the last great Tungan rising. From this place the route led along the banks of an earlier river bed, now

completely dry. Parallel to it, on the east, there extended a network of wind-eroded clay terraces, marking what in ancient times may have been fertile land. To the west of it the cultivated area extends even now much further south, receiving irrigation from a main canal which takes off from the Tang Ho some thirteen miles above Tun-huang-hsien. A modern watch-tower by the roadside, together with its adjoining quarters half in ruin (Fig. 167), which was reached after some six miles from Chên-fan-hsien, was of interest to me as an illustration of what the ancient watch-stations along the Limes might have looked like at one time.

Gravel mounds with walled gateways.

To the west of it, across the bare gravel 'Sai', my attention was attracted by remnants of walls rising here and there above the plain. Riding across the canal towards these walls, I soon noticed that they invariably flanked what seemed to be gateways to large rectangular enclosures marked by low mounds of gravel. It was impossible to believe that these low mounds represented completely decayed walls when I saw that the walls on either side of the gateways still rose quite solid to a considerable height. In the two enclosures that I was able to examine more closely, these flanking walls were from five to seven yards long and rose to a height of 18–20 feet, with a thickness of eight feet. The bricks in their well-set masonry were sun-dried but massive, and of distinctly ancient appearance, measuring 17 by 10 inches, with a thickness of 10 inches. Beyond this the front of the enclosures, usually facing south, as well as the other sides, were merely low ridges of gravel. The relief they presented under the slanting rays of the setting sun made them just perceptible.

Tumuli within enclosures.

Along the line of these 'walls' I could nowhere find any traces of brickwork or even of the familiar fascines. One of the quadrangles measured about 75 by 70 yards. The enclosing ridges were invariably orientated, though but roughly. Within the enclosed areas there were always to be found several low tumuli, the largest usually facing the entrance from the north, and the rest scattered in small groups roughly aligned. In one quadrangle the tumuli were from about 21 to 45 feet in diameter, with a height of from five to six feet. In another some of these roughly circular mounds rose to a height of about eight feet.

Ancient places of burial.

The local Chinese with us, of course, professed complete ignorance as to the character of the remains. But the idea that these were ancient places of burial soon occurred to me and to Chiang Ssŭ-yeh as well. Neither of us knew at the time of a closely corresponding practice, old or modern, which would support this surmise. So it remained for my explorations of 1915 at ancient cemeteries near Kara-khōja and other sites of the Turfān district to furnish me with definite evidence of its correctness.[1] There I found an extensive series of Chinese tombs belonging to T'ang times that had been cut into the hard clay of alluvial fans presenting the same surface appearance as this 'Sai'. Their position was similarly marked by low circular mounds within rectangular enclosing ridges of gravel; only the walls flanking the entrance were absent. From what I subsequently observed at a much smaller cemetery near Ying-p'an, at the foot of the western Kuruk-tāgh, I am inclined to infer that the custom of arranging burial-places in this fashion, with groups reserved perhaps for particular families, etc., may date back to an earlier period.

Difficulties about exploring graves.

On this question, as on other antiquarian points connected with my observations in Kan-su, competent Sinologues could probably throw light from Chinese literary sources. What mattered for me at the time of surveying these remains near Tun-huang, and also soon after near Nan-hu, was the practical certainty that, if the mounds proved to mark burial-places, I should not be able to get Tun-huang people, particularly orthodox in their superstitious awe of graves, to help in the systematic opening, or even to tolerate it on the part of foreign 'barbarians'. Any attempt of this kind was bound to produce local ill feeling against us, if not worse, and this was likely to interfere seriously with more attractive and fruitful archaeological operations of mine in the desert and elsewhere. So

[1] See *Third Journey of Exploration, Geogr. Journal*, xlviii. p. 204.

I do not regret the prudent restraint which both my own feeling and Chiang Ssŭ-yeh's advice imposed upon me as regards these cemetery sites. I would, however, recommend them to the attention of some future archaeologist visitor—whenever 'modern progress' may have swept away the traditional respect for the habitations of the dead even among the pious folk of that conservative back-water of Kan-su. Only let him do the work with systematic thoroughness of research and not leave too much to be destroyed by the mere greed of local exploitation that seems to be at work further east!

March along left bank of Tang Ho.

We camped that night near where the Tang Ho debouches from a deep cañon-like depression flanked by steep conglomerate cliffs, and about three miles from where the main western canal of the Tun-huang oasis takes off on the left bank. A march of some thirty miles, prolonged until after nightfall, then brought me on April 6 to Nan-hu. For the first half of this distance the route kept close to the southern edge of a gravel-covered plateau which falls off with precipitous cliffs, generally from about 80 to 100 feet high, to the deep-cut bed of the Tang Ho (see Map No. 78. c. 4). The latter seemed like a huge fosse, with a glacis stretching away northward from the brink of its counter-scarp. Above the scarp on the south there rose the absolutely barren foot-hills of the Nan-shan, covered here, as also to the south of Tun-huang, with those formidable dunes of drift-sand which account for the latter's alternative name of *Sha-chou*, the 'City of the Sands'. Considering that these forbidding sand-covered slopes are really impassable, and that there is, judging from Captain Roborovsky's surveys, no practicable route up the deep-cut gorge of the Tang Ho from where it turns sharply south-east into the mountains, it was easy to realize how well protected Tun-huang was from any nomadic attacks which might otherwise proceed from the high plateaus in the south. Both near the debouchure of the river and where it makes its big bend (Map No. 79. c. 1) there were half-ruined watch-towers, built on the cliffs above the left bank and commanding a view of the deep-cut bed. But they bore no ancient look, nor did the two small brick Stūpas, well plastered and manifestly still receiving worship from wayfarers, which I passed at the roadside shelter of Shih-wu-fou.

Dune-covered foot-hills.

Line of ancient embankment.

It was after about two miles from the point where the route, continuing to the south-west, leaves the vicinity of the river near the above-mentioned bend, and as we were skirting the last off-shoot of a bare ridge rising gently towards the south, that I first noticed what seemed like a low dyke, or *agger*, of gravel and stones. It was the embankment which Mr. St. George Littledale, in the account of his pioneer journey of 1893, mentions as having been noticed by him on the last march before reaching the Sha-chou oasis, and which the Royal Geographical Society's *Map of Tibet* has duly marked.[2] His brief description of it proved quite correct, and the shrewd guess he had hazarded as regards its character seemed *a priori* deserving of consideration. The 'embankment' rose only four or five feet above the bare 'Sai', and could easily have been mistaken for a natural swelling, had it not stretched away steadily to S.255°W. in a line perfectly straight and keeping close by the route for upwards of five miles. From where the route first approached it I could see it also continuing, though less distinct, in the opposite direction, until, as the plane-table showed, it must have struck the cañon of the Tang Ho just at the river's sharp bend. The *agger* was broad, measuring about twenty-four feet at its base, and, as the surface on its top was hard, it seemed to have been used as a cart-track. Of watch-towers or any other structural remains along it I

[2] Cf. his paper *A Journey across Central Asia*, in *Geogr. Journal*, 1894, iii. p. 458: 'The day before reaching Saitu our path for seven or eight miles followed an embankment which was four or five feet high and about ten yards across; where our path branched off, the embankment continued as far as we could see. I never heard that the Great Wall of China extended beyond Suchau, but this certainly much resembled parts of the wall that we afterwards saw, and if it was not the wall I am quite at a loss to say what its use could have been.'

could not find a trace. With nothing but absolute gravel desert on either north or south, it seemed hard to believe that this line had been drawn for a defensive purpose. Yet, on the other hand, I could not fail to note that, as the Map (No. 79. B. 1) shows, the line of the *agger* certainly forms a direct continuation to the Nan-hu oasis of the great natural flank defence provided by the fosse of the Tang Ho. The question as to the purpose which this embankment was originally intended to serve will be discussed further on.[3]

Cairns and enclosures of burial-grounds.

At last the route diverged to the south-west, while the puzzling *agger* was seen to run straight on towards a tower visible in the distance. It was just here, about one and a half miles from the edge of the belt of vegetation surrounding the present area of cultivation at Nan-hu, that my eye was caught by many low heaps of stones rising on the level expanse of gravel. Their sizes varied greatly, but they were always of circular shape, and either had a straight line of stones running out at right angles from one side like a handle, or else faced small rectangular plots of ground laid out with big pebbles. The circular 'cairns' never rose more than three or four feet above the ground. But the slanting light of the evening made them stand out in relief on all sides by the dozen, and there could be no doubt that this weird expanse represented an ancient burial-ground. I was still wondering whether it belonged to the period of Chinese occupation, or possibly was the mark left behind by people of a less developed civilization, when within view of the edge of vegetation, and not far from the track, I sighted in the dusk a brick-built gateway and an adjoining quadrangle marked by low gravel ridges, just like those I had examined the day before on the south-western edge of the Tun-huang oasis. Within the quadrangle I made out two circular tumuli (Fig. 165 shows one of them) larger than the cairns by which I had just passed, but exactly corresponding in shape. There could be no doubt any longer that both cairns and enclosures belonged to the same people, and probably also dated from approximately the same period.

Section II.—THE NAN-HU OASIS AND ITS PRESENT RESOURCES

Attractions of Nan-hu oasis.

Nan-hu, holding altogether some thirty Chinese homesteads scattered in a number of tiny hamlets, proved an unexpectedly pleasant little oasis, with its abundance of fine trees, its limpid spring-fed water, and its general air of rural seclusion and ease. In my Personal Narrative I have given a brief sketch of the local environment and of the comfortable conditions which under-population, coupled with adequate arable land and irrigation resources, has produced here for the present settlers.[1] But it was the opportunity for archaeological observations of interest, not the rural attractions of Nan-hu, welcome as the change was, which induced me to extend my stay there to four days. However, before I proceed to detail my observations, it is desirable to give a brief account of the topographical features which determine the present character and former importance of what was once the westernmost permanent agricultural settlement of 'China within the Wall'.

Alluvial basin of Nan-hu.

Most of the cultivated parts of Nan-hu, as well as the areas adjoining to the east and south which débris of the familiar 'Tati' type proves to have been occupied at earlier periods, are situated within a small basin close to the outermost foot-hills of the range which the *tāgh-yol*, or 'mountain route', to Lop follows. This basin, as far as it now shows signs of subsoil water or occasional surface floods and contains arable ground or scrubby jungle, extends for about ten miles from south-east to north-west, with a maximum width of about five miles (see Map No. 79. A, B. 1). The gravel-covered plateau crossed by the route from Tun-huang borders it on the east, while on the west and south it is hemmed in by low ridges and by belts of dunes covering their slopes. To the north-west this basin finds its continuation in a gradually widening stretch of clayey steppe

[3] Cf. below, pp. 617 sqq.

[1] Cf. *Desert Cathay*, ii. pp. 75 sqq.

which represents the alluvial fan of the Nan-hu drainage (Map No. 78. A. 4). It is now devoid of water, but shows abundant evidence of occupation in recent times for a distance of at least nine miles or so further, and the soil remains for some distance beyond of a kind which could at once be brought under cultivation if water were made available. The whole of the elongated basin, or trough, obviously owes its origin to the drainage which a deep-cut flood-bed brings down from the high range immediately to the west of the Tang Ho valley. This flood-bed, or 'Sai', also *chap*, as it would be called on the north slopes of the K'un-lun between Keriya and Lop, was surveyed higher up for a considerable distance by Captain Roborovsky and is clearly indicated in his map.

Water-supply of Nan-hu.

The existence of the Nan-hu oasis, in ancient as in modern times, is due solely to the water-supply which this drainage-bed assures. Now it is mainly subterraneous, coming to the light in the form of springs, i. e. as *kara-su*, or 'black water', to use the familiar term current in the Tārīm Basin.[2] If the scanty local information which I succeeded in extracting from the Nan-hu people, as secretive as all Chinese settlers in these regions, can be trusted, water running on the surface, apart from canal water supplied by the springs, nowadays only reaches the Nan-hu area occasionally in the form of big floods, probably caused by exceptional summer rains in the mountains. These floods were said to occur only in certain years during July and August and to follow the river-bed, otherwise always dry, which amidst low dunes and tamarisk-cones skirts the eastern edge of the Nan-hu basin. As seen in the map, this river-bed is crossed by the road from Tun-huang just south of the western end of the *agger*, and not far from the extreme eastern portion of the 'Tati' area to be described below. Such floods are never used for cultivation, and I realized the destruction which they sometimes cause by an observation to be mentioned presently.

Irrigation of cultivated areas.

Cultivation is at present, and probably for a long time back has been, wholly dependent upon springs which are perennial and fed by the constant subterraneous supply carried in the drainage-bed. In this respect, as in several other physical aspects, Nan-hu presents a very striking resemblance to the smaller oases like Domoko, Gulakhma, Achma, which are to be found along the foot of the K'un-lun glacis between Chīra and Keriya. I shall presently have occasion to return to this geographical parallelism. The main area of cultivation, now extending, as the Map (No. 79. A. 1) shows, for about two miles from east to west and over one mile wide in the middle, is irrigated by canals from a lake reservoir full of limpid spring-water and situated about three-quarters of a mile from the eastern edge of it.[3] This lake, over 1,000 yards long and about 160 yards across where it is widest, is of artificial origin, having been formed by damming up the uppermost portion of a deep-cut ravine which exactly corresponds to the *yārs* of Khotan and other oases in the western portion of the Tārīm Basin.[4]

Reservoir constructed in ravine.

The ravine passes with a steadily widening bed right through the little oasis, and further down deepens to 70–80 feet. It evidently had itself been eroded from the soft alluvial loess soil by floods following the line which is marked by a succession of springs extending for about half a mile eastwards. Through a process exactly corresponding to that which I had been able to observe so often in the 'Yārs' of the Khotan oasis and east of it, more springs had gathered in the ravine thus formed. By catching their water in the lake reservoir just mentioned, as well as the water of the upper springs behind another dam built at its head, it was made possible to utilize this water, which otherwise would have run to waste in the Yār, for irrigation of the fields on either side of it. A small

[2] Cf. for *kara-su* in the Khotan region, *Ancient Khotan*, i. pp. 94, 126; also above, pp. 204, 475.

[3] This lake, together with a smaller reservoir higher up, is shown in the map due south of the ruined town. Its connexion with the stream passing in a 'Yār' through the cultivated area ought to have been indicated.

[4] Regarding these *yārs* and their formation, cf. above, pp. 203 sqq.; *Ancient Khotan*, i. pp. 191 sqq.; *Desert Cathay*, i. pp. 160, 238, etc.; *Ruins of Khotan*, pp. 256, 350, 447.

canal, taking off from the upper reservoir through a deep cutting in the steep loess banks, carries about eleven cubic feet of water per second for the irrigation of the cultivated area east of the ravine. Another canal, which is fed by the lake further down, carries about nineteen cubic feet per second and is utilized for irrigating the fields on the west. The amount of constructive labour which it must have cost thus to assure irrigation is proved by the size of the dam which holds up the lake. I found it to measure fully 147 yards on the top, with a width there of over twenty-five yards, while its height above the bottom of the ravine was about thirty-five feet. The dam was said to have been constructed about thirty years before my visit, and the fact that I found large elms half-submerged in the lake but still alive seems to support the statement to some extent. Possibly an older barrage, which had fallen into neglect after the devastation of the oasis by the Tungans, was then raised to a higher level.

Questions of earlier irrigation.

However this may be, the above-recorded discharge of the existing canals does not exhaust the full supply of water available; for I found an unused outflow leaving the end of the lake, and this, joined by some small springs at the bottom of the ravine, forms there a small, lively stream, carrying over eleven cubic feet of water per second. By raising the dam so as to bring the level of the lake nearer to that of its banks, which at the present outflow are some twenty-five feet higher, it is certain that this additional water-supply could also be utilized and a considerable extent of fertile ground, now lying waste, be 'commanded' for irrigation. But whether this water, at present unused, might be carried to the débris-covered 'Tati' areas near the ruined town, and how much of them might be reclaimed in this way, it would be impossible to determine without carefully taking levels and making a series of prolonged observations as to the local conditions of irrigation, etc. Still less safe would it be to assume that irrigation in this area would in earlier times have depended, as it certainly does at present, upon the artificial storing of the spring-water by means of a barrage. There was nothing either in remains or local tradition to suggest a particularly high age for the artificial lake, and the very fact that the present name of the oasis, *Nan-hu*, or 'the southern lake', is directly taken from it seems to indicate a somewhat modern date for it.

Additional irrigation resources.

The outflow from the lake is swelled by other springs rising in the marshy bottom of the Yār further down, and the little stream thus formed passes through a rocky gorge between two low sandstone ridges, which confine the main oasis on the north. The very fact that this gorge has been cut through is sufficient evidence of the vastly greater volume of water which once carried on here its work of erosion. About two miles from the north end of this gorge I found the stream of the Nan-hu Yār still used for irrigating the fields of the tiny, half-abandoned hamlet of Shui-i, which I shall have to describe below. That this stream where I measured it on April 12, about one and a half miles below Shui-i, still carried over twenty cubic feet of water per second is conclusive proof that some of the now abandoned village lands further north in the continuation of the Nan-hu basin could be brought under cultivation again, even with the water-supply still available.

Outlying areas of cultivation.

Before turning to the remains that mark the much greater extent of ancient cultivation at Nan-hu, I may complete my account of its present resources by the mention of two small outlying areas. One is a tiny and still occupied hamlet, half a mile to the south of the lake reservoir; it receives its water from some springs issuing at the foot of a low reed-covered terrace about a quarter of a mile to the east. I found drift-sand encroaching on the fields of the three or four farms which seemed the last remnant of a once more populous settlement and were themselves half in ruin. A considerable 'Tati' area was subsequently noted by Surveyor Rām Singh when he passed Nan-hu in October, 1907, to the west of this hamlet. It may have once received water from some springs the presence of which he noted at a distance away to the south-east, but which are no longer utilized for cultivation.

Abandoned hamlet east of Shui-i.

Another outlying hamlet, situated about two miles to the east of Shui-i, had passed out of occupation in quite recent years. But it deserves mention because its fate illustrates the destructive effect which occasional great floods may have upon cultivation at an oasis situated like Nan-hu, quite apart from other risks due to desiccation and loss of population. The dry river-bed previously mentioned, which skirts the eastern edge of the basin containing the oasis, has cut itself, a short distance to the north of the present Tun-huang road, deep into the soft alluvial soil and becomes a cañon-like Yār. Springs that rise in its gradually deepening bottom gather into a small stream, and the water from this had, probably by means of a barrage, been utilized for a small colony which existed, until about fourteen years before my visit, at a point of the Nan-hu basin about three miles north of the main area of cultivation. But a big flood, said to have occurred in August, 1893, had swept away irrigation channels and homesteads, and buried the fields under coarse sand. On visiting the place, I could still clearly see the effects of this catastrophe in the ruins of the three or four farms that occupied the once cultivated depression, and in their uprooted arbours. Any trees that the flood had left standing were either dead or dying, and were gradually being cut down for timber. The bed of the irrigating stream had been scooped out into a steep-walled narrow Yār, with its bottom some twenty feet below the old level. The stream itself carried about twenty cubic feet of water per second, and this volume showed the probable source of the irrigation which once supplied the abandoned modern settlements subsequently met with from six to nine miles north-west of Shui-i (Map No. 78. A. 4).

Depopulation through Tungan inroads.

I may follow up this brief survey of the physical aspects of the Nan-hu oasis with a few general remarks about the conditions affecting its present cultivation. They must necessarily be brief, as the time for personal observation was limited and the difficulties about securing correct local information great. Pleasant as was the impression created by the large, comfortable homesteads of the main oasis, scattered among groves of fine elms and ashes, by the well-tilled fields which extended around them, and by the neat irrigation channels with rows of big trees along them, the effects of the depopulation left behind by the Tungan inroads could be observed on every side. According to the information I received, that devastating tornado had first swept across Nan-hu in the year 1866. Scarcely a man, woman, or child was said to have escaped. Those who had taken their places after the imperial authority was re-established were still enjoying the ease which resulted from under-population, both as regards arable land and available water.

Oasis resembles Domoko.

But it was obvious that, comfortable as such conditions might be for individuals—and most of the farmers seemed thriving in spite of their marked *insouciance*—they could neither assure adequate use of the irrigation available nor provide a sufficient reserve of labour to cope with the risks which sudden floods, such as the one above mentioned, would involve for the water-supply of an oasis so peculiarly situated as Nan-hu. By its total dependence on springs issuing at the foot of a huge gravel glacis and liable to considerable shifts in level, Nan-hu very curiously recalled the observations I had made at the Domoko oasis as regards the physical causes of the repeated changes in position and extent which the cultivated area has undergone there, as proved both by remains and local tradition.[5] It would need a careful survey of the barren gravel slopes to the south to determine to what extent, if any, the changing level at which the water-supply, i. e. the *kara-su*, of Nan-hu comes to light is also influenced, as probably is the case at Domoko, by lateral deflexions of the flood-bed, or 'Sai' to use the Turkī term, that feeds it subterraneously.

These peculiar physical conditions affecting the water-supply, and thus the cultivation, of

[5] Cf. above, pp. 203 sqq.; also *Ancient Khotan*, i. pp. 458 sqq. For a curious coincidence in date of one of the shifts recorded in the case of 'Old Domoko', see below, pp. 626 sq.

Nan-hu make it more difficult to ascertain with sufficient accuracy how far the great reduction in the size of the settlement, as indicated by the ancient remains to be noticed presently, is due to that potent cause, desiccation, of which the general aspect of the ground would make us think in the first place, and how far to circumstances connected with the human factor, i.e. the available population, and local history. For the present I must content myself with recording two conclusions of a general character. On the one hand, it appears to me certain that the water-supply at present available, over eighty cubic feet per second from all sources, would permit of a far larger area being cultivated than is possible now with the labour of the thirty odd homesteads. On the other hand, I feel inclined to doubt whether the agricultural resources thus provided would by themselves suffice to account for such an extensive area of close occupation in ancient times as the surviving 'Tati' remains indicate. The explanation may well be sought in historical and geographical circumstances, which made Nan-hu a point of special quasi-strategic importance during an early period, and which I shall have occasion to set forth presently.

Settlement reduced since earlier period: possible causes.

Section III.—THE ANCIENT REMAINS OF NAN-HU

The ruined town of Nan-hu.

The only conspicuous remains of antiquity which survive within the basin of Nan-hu are the ruins of a small walled town, known to the people merely by the name of *Nan-hu-ch'êng*, 'the walled city of Nan-hu'. Its broken walls, reached within a mile eastwards from the edge of the present oasis and approached over scrub-covered ground once manifestly under cultivation, form an irregular rectangle, as shown by the plan in Plate 35. Of the north face, measuring about 400 yards in length, a considerable portion still survives, though half-buried under high dunes which have helped to protect it (Figs. 159, 160). Of the somewhat shorter east wall (on right in Fig. 159) and of the west wall, too, portions are still extant to a fair height, though cut through and broken up by wind erosion. This, with the abrading drift-sand close at hand as its instrument, can work here to full effect. On the south, curiously enough, the wall has disappeared completely, though its position was clearly traceable by the mound into which the clay rampart once bearing it had decayed. Yet the wall proper was of very solid construction, being built with carefully stamped layers of clay 5 to $5\frac{1}{2}$ inches thick, and seemed of early date. From fourteen to twenty feet thick at its base, it still rises in places eighteen to twenty-one feet in height. Its foot rests on a broad clay rampart, which seemed to raise it another twelve feet or so above the level of the ground in the centre. But as the whole of the interior is covered with drift-sand bearing slight scrub, as seen in Figs. 159, 160, neither the original level of the ground nor the real height of the rampart could be made out with certainty. There was a much-decayed inner wall (Fig. 160, on left) on the north-west, marking a small separate enclosure. Owing to the effects of erosion and the presence of drift-sand in the gaps of the walls, the position of the gates could no longer be ascertained.

Mounds within walled town.

The interior contained no recognizable ruins, only some low mounds covered with drift-sand. Being able to obtain a number of additional labourers from the neighbouring hamlets, I had trenches cut through these down to a depth of about five feet, where the men reached what seemed the natural soil. But the only finds made here consisted of fragments of very hard burnt bricks, dark grey in colour (for a specimen see Nan. Ft. 007), and two intact burnt bricks, also very hard, but of a coarser clay and yellowish in colour; these measured 14 by $7\frac{1}{2}$ inches, with a thickness of $4\frac{1}{2}$ inches, being thus of the same size as that which prevails in the watch-towers of the Limes. Like some large pieces of rubble, they all lay loose in the earth and not far from the top of the mound, as if left over from some structure the materials of which had been quarried and removed. Chiang Ssŭ-yeh, who, like other educated Chinese of antiquarian tastes, always showed a lively

interest in old, well-burnt bricks and knew how to test their hardness, thought that these bricks were of distinct antiquity.

Coin finds at ruined town.

But I felt more assured on this point when a careful search, made by Naik Rām Singh along the exposed portions of the rampart, brought to light on the east face fragments of a Han coin of the *Wu-chu* type and of an uninscribed clipped copper coin of the same period, besides two fragments which are likely to belong to T'ang issues. They were all found some inches below the surface. Similar evidence of antiquity was given by coins which were picked up under my eyes on wind-eroded ground outside and close to the north and east walls. These include eight *Wu-chu* pieces and three uninscribed coins, which may belong to the fourth–fifth century A. D. Owing to the abundant cover of drift-sand few small objects of miscellaneous character were found in the interior of the circumvallation. But it is of interest to note that among the pottery fragments there is one with the smoky grey 'mat-marked' surface which is characteristic of the coarse pottery of the Han period prevailing along the Limes (Nan. Ft. 001). There is also a fragment from the side and rim of a shallow bowl, made of very hard-fired grey clay, which Mr. Hobson attributes to Han times (Nan. Ft. 004). A small fragment of porcelain, Nan. Ft. 005, found on the surface of the rampart serves, however, to remind us that the ruined town had remained accessible until much later times, as, in fact, it still is at the present day.

Ancient débris area of *Ku-tung-t'an*.

To the north and north-east of this small ruined town extends an area of wind-eroded ground, showing all the typical features of the 'Tatis' in the Khotan region and elsewhere. From east to west it spreads for fully two miles, and its width is about one mile. It is partially overrun by detached semi-lunar dunes which, small at first on the east, grow higher and higher as the ruined town is approached. No doubt, the obstacle presented by its walls accounts for this increasing height, which reaches up to about thirty feet. Everywhere the bare patches of clay which appear between the dunes are abundantly covered with small débris of hard materials, such as pottery, stones, glass, metal, and the like. The uniform distribution of this débris, wherever the ground is left clear of dunes, makes it certain that it marks a thickly-occupied area of habitations once adjoining the ancient town. The people of Nan-hu call the whole site appropriately enough *Ku-tung-t'an*, '[the place] to search for old things'. They have, no doubt, searched it for generations past, especially after big sand-storms, as keenly as Khotan 'treasure-seekers' their familiar 'Tatis'.

Fragments of ancient pottery.

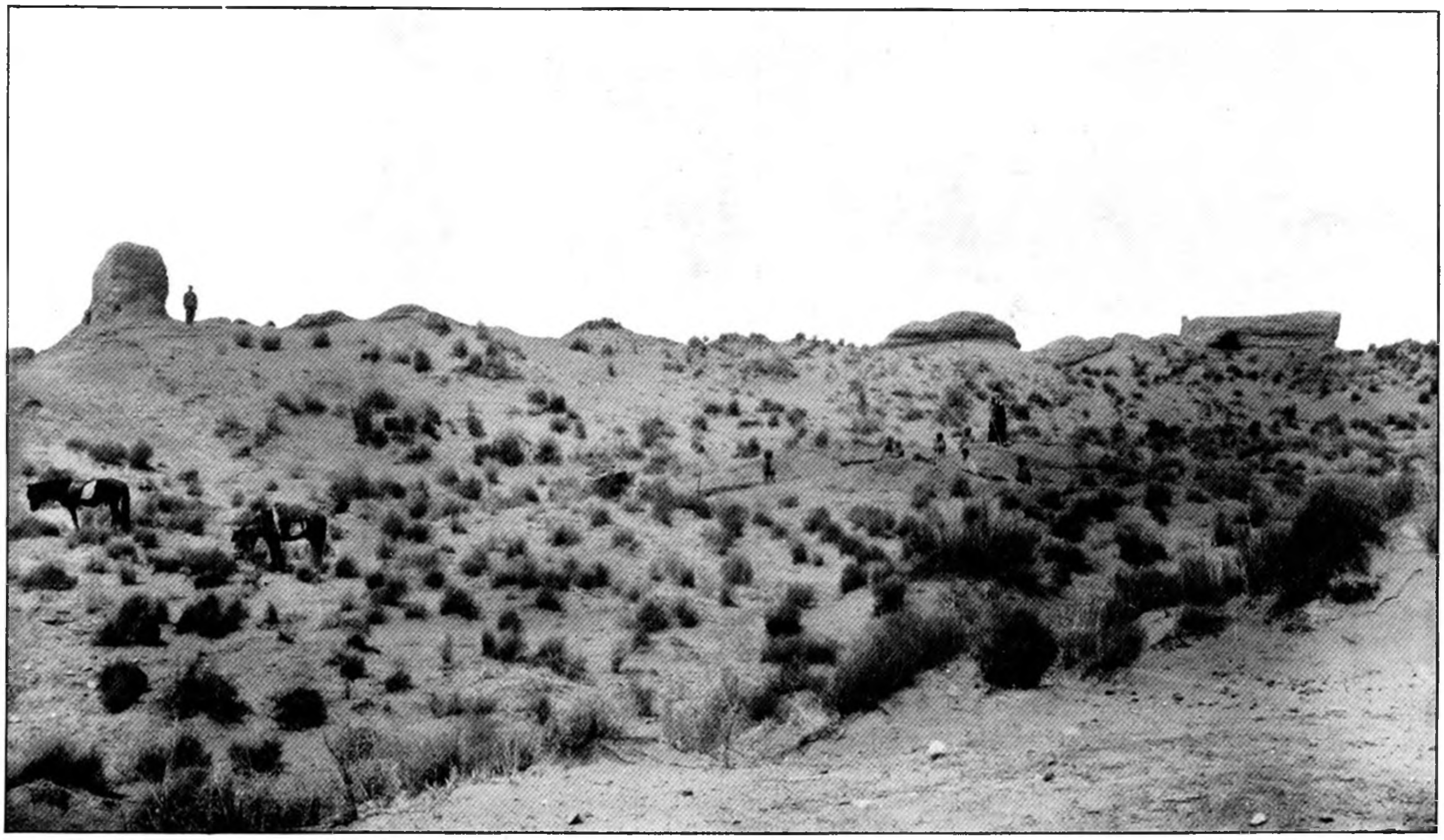
Repeated visits allowed my assistants and myself to collect here a considerable number of specimens of this miscellaneous débris, which will be found described in the List below.[1] Among them I may specially mention potsherds of the prevailing dark grey, often 'mat-marked' ware (Nan. T. 001–006, etc.); spinning whorls made of the same ware (Nan. T. 0011–0016); fragments of glazed pottery and stone ware (Nan. K.T. 001, 006; Nan. T. 007), which Mr. Hobson is inclined to attribute to T'ang or Sung times; bronze arrow-heads (Nan. T. 0025, 0027) of types familiar to us from the Niya Site and the Tun-huang Limes, etc. It is of special interest to note that amongst such plentiful keramic débris we failed to notice a single piece of porcelain. I consider this an important indication that the site was abandoned before porcelain became common under the Sung dynasty after the tenth century A. D. The single fragment of porcelain found on the surface within the ruined town walls and already mentioned can, in view of such strong negative evidence outside, only be supposed to have been left behind by some later visitor.

Chronological evidence of coins.

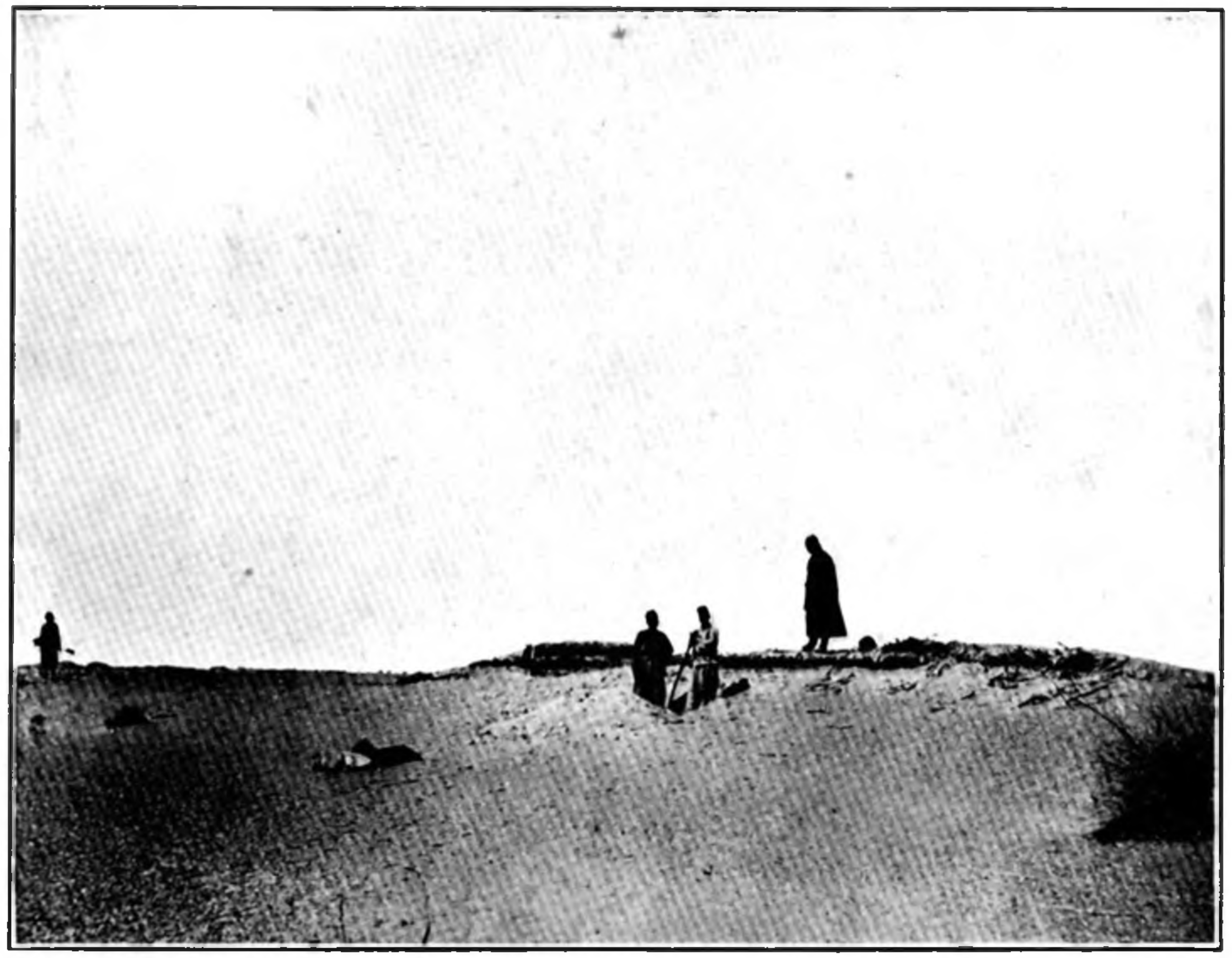
With the chronological evidence derived from the small miscellaneous 'finds' on the 'Tati' the numismatic evidence obtained on the same ground agrees in a striking fashion. Among the coins

[1] The distinctive mark *Nan. T.* has been used for specimens picked up in the vicinity of the ruined town; *Nan. K.T.* for those found on the 'Tati' further to the north-east.

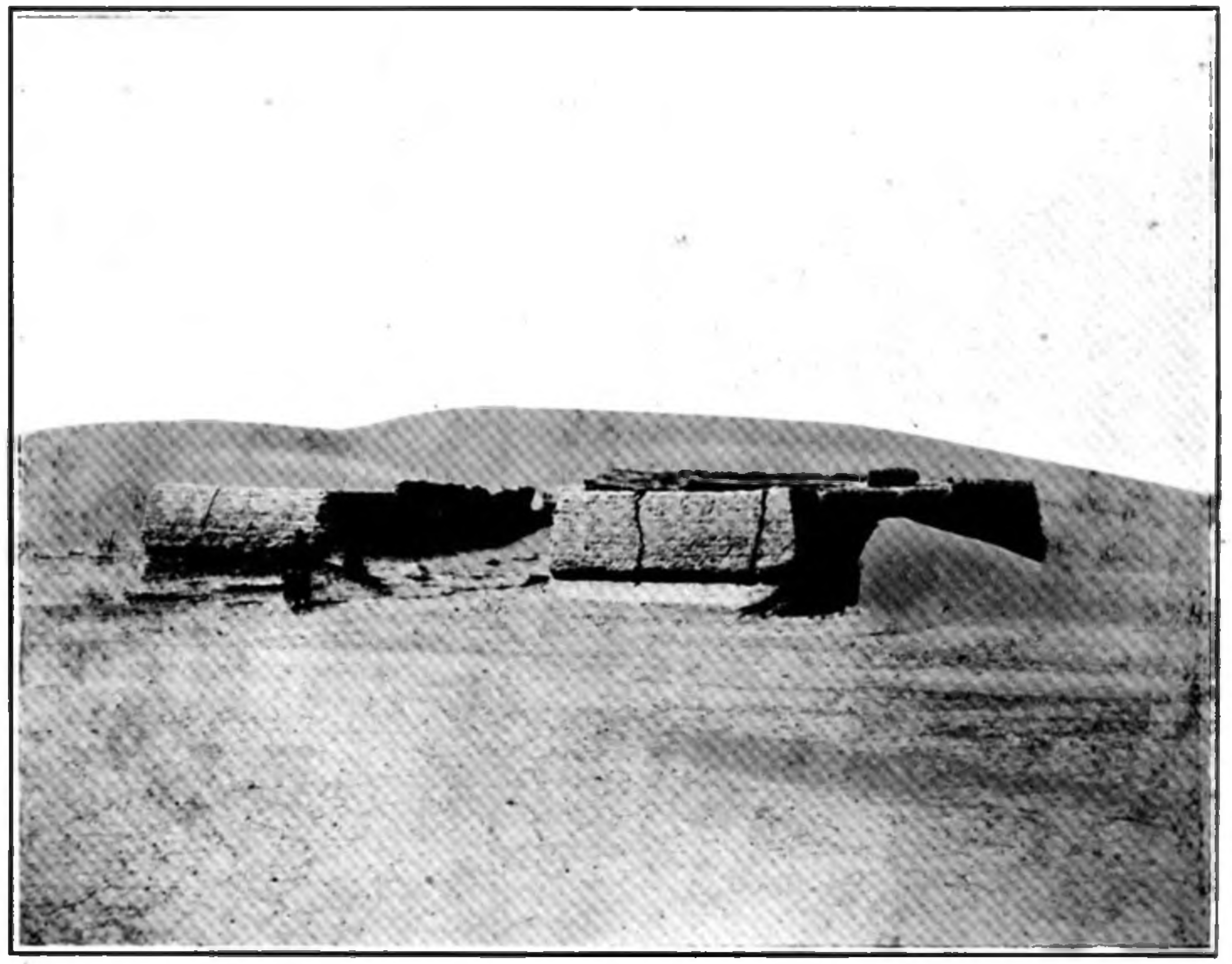
159. VIEW OF RAMPARTS, PARTIALLY BURIED IN DUNES, OF RUINED TOWN, NAN-HU, LOOKING FROM INTERIOR TOWARDS NORTH-EAST CORNER.



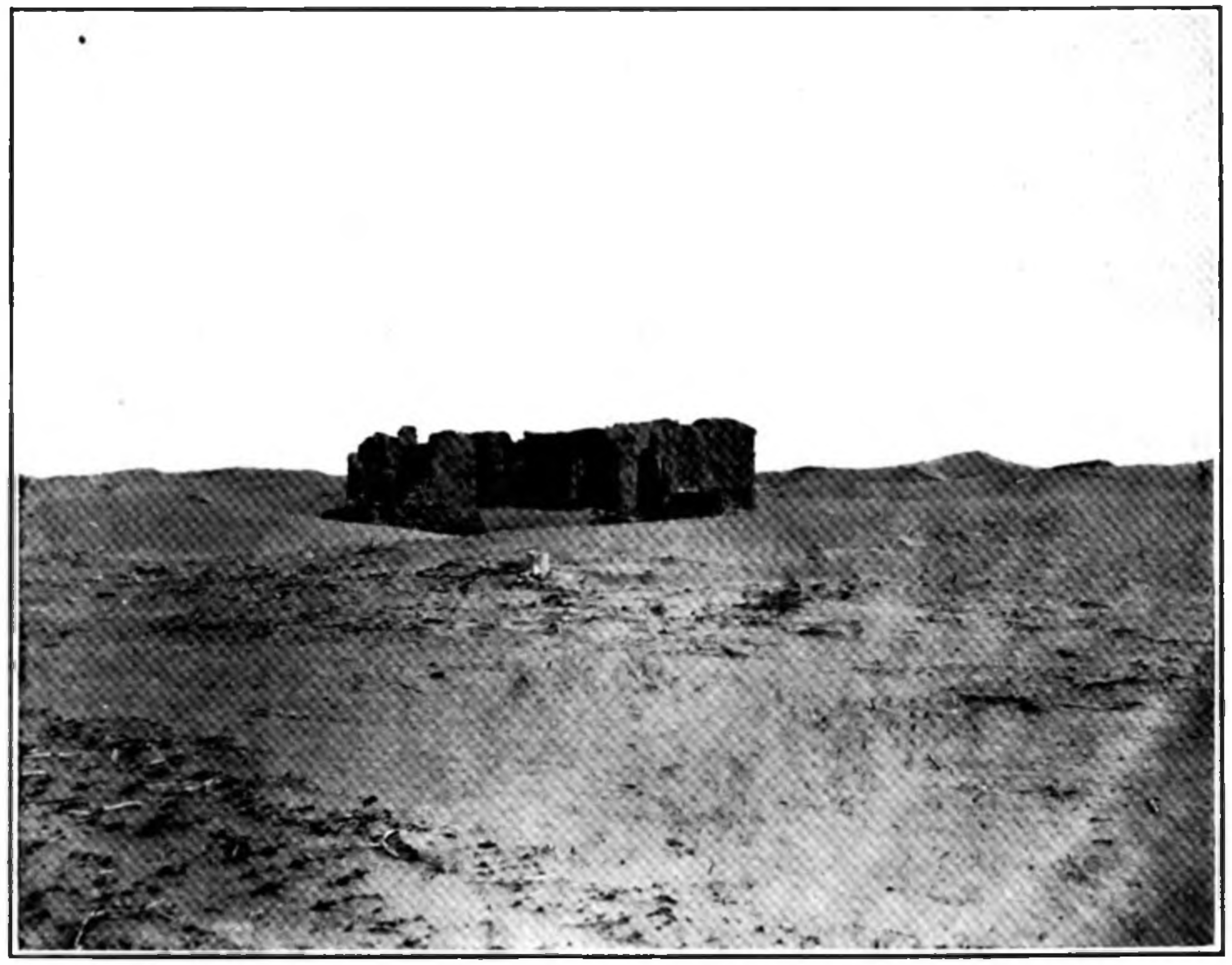
160. REMAINS OF INNER RAMPART, NEAR NORTH-WEST CORNER OF RUINED TOWN, NAN-HU, SEEN FROM INTERIOR.



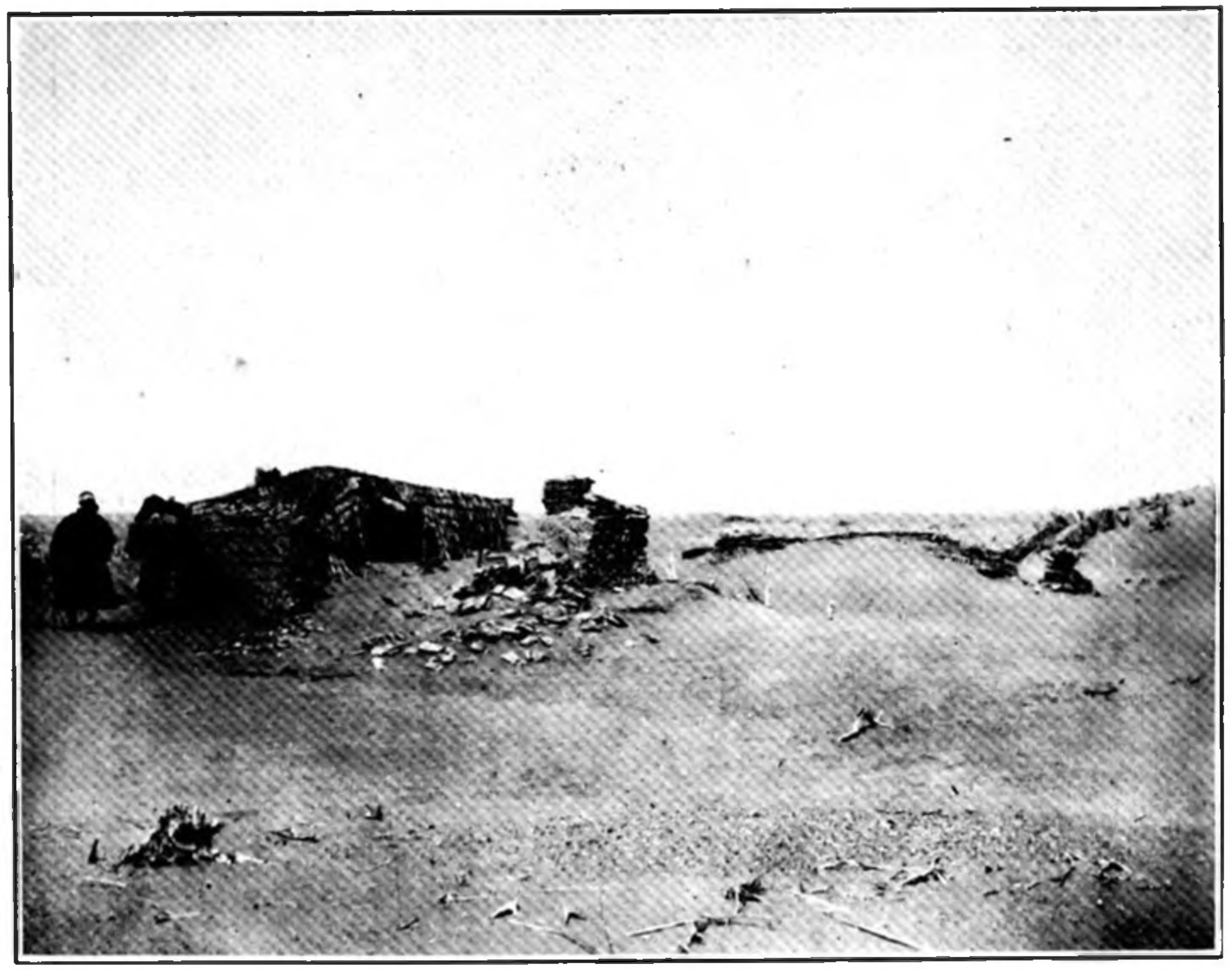
161. REMNANT OF ANCIENT BORDER WALL NEAR WATCH-TOWER T. XXVII, TUN-HUANG LIMES.



162. LAST RUINED FARM OF KUAN-TSOU, NORTH OF NAN-HU.



163. ABANDONED HOMESTEAD OF KUAN-TSOU, NORTH OF NAN-HU.



164. REMAINS OF FARM AND FENCED ARBOUR, ABANDONED TO DESERT, AT KUAN-TSOU, N. OF NAN-HU.

which were picked up by Chiang Ssŭ-yeh in the course of a careful search, mainly to the east of the ruined town, and which can be recognized, there are, as shown in Appendix *B*, only a single Sung coin with the *nien-hao* of A. D. 1038–40, nine coins with the legend *K'ai-yüan* belonging to the T'ang period, and no less than eleven which certainly belong to pre-T'ang issues. It is interesting to note that these last, besides three pieces of Wang Mang's issue of A. D. 14–19 and three *Wu-chu* coins, comprise a copper coin bearing the legend *Pan-liang* ('half an ounce') which is of a type of the second century B.C. not otherwise represented in my collection.

Remains at eastern edge of 'Tati'.

Before I discuss the identification which Chinese learned tradition assumes for the site of the 'old town' of Nan-hu, and which, as we shall see, receives much support from my archaeological observations and finds, it will be convenient to notice what other old remains I examined at and near the site. After moving on to the north-east for about three-quarters of a mile across the *Ku-tung-t'an* 'Tati', a ruined mound is reached which obviously marks the position of an ancient watch-tower. It measures about twenty feet square at its base and, built with carefully stamped layers of clay about 2–2½ inches thick, still rises to some twelve feet in height. It is known to the Nan-hu people by a distinctive name,[2] and was said to have stood by the side of the old road to Tun-huang where it crossed the dry river-bed already mentioned towards the western end of the ancient embankment on the 'Sai'.[3] That road was declared to have remained in regular use until the great flood of 1893 had, as stated above, here transformed the dry bed into a deep 'Yār' and made its passage impossible for cart traffic. I found in fact the actual bed cut into the soil to a depth of about fifty feet and the very steep banks showing clearly its recent formation. I may note in passing that the well-marked stratification, observed in this cutting, of alternate layers of red alluvial clay and of sand or fine gravel gives plain evidence of a succession of wet and dry periods which must have affected the formation of this alluvial fan during geological times.[4]

Ruined watch-tower at end of embankment.

Continuing to the north-east for another mile or so across a sandy area, where growth of tamarisks and reeds hid more 'Tati' remains and the line followed by the old cart track was still traceable in places, I reached the margin of the riverine depression. In a conspicuous position above the edge of the bare gravel plateau rose the ruined watch-tower which I had already noticed on my first approach to Nan-hu. Manifestly old in its main structure, built with solid *pisé* layers of three to four inches in thickness, it showed plentiful repairs of relatively modern look, executed in sun-dried bricks of small size. Its base measured thirty-six feet four inches square, and its height twenty-two feet. My 'guide', an old village headman of Nan-hu, who in time grew somewhat less secretive than the rest, declared that the tower had until about seventy years before my visit been used for a post guarding the route. A small domed structure, badly decayed, which I found close to the north-east of the tower, together with a large heap of refuse, seemed to bear out this statement. The ancient embankment, which the road had followed from the great bend of the Tang Ho, was clearly seen to end at the tower, and this, in conjunction with what has been observed above as regards the track crossing the 'Tati' towards the ruined town and used as the route to Tun-huang down to 1893, makes it appear practically certain that there existed a close connexion from early times between the embankment and the direction of the road from Tun-huang.

Origin of ancient embankment.

The point merits special consideration with regard to the question as to the origin and character of the embankment. According to the local belief, as communicated by my informant, it was intended

[2] The name sounded like *Pan-chi-tun*, but I regret that I did not obtain a record of it in Chinese characters. Hence its transcription is doubtful.

[3] See above, pp. 610 sq.

[4] About half a mile further up I noted the following layers in the banks of the river-bed, there from 12 to 15 feet deep: red clay at bottom, 2–3 feet thick; coarse rubble, 1 foot; fine gravel, 2 feet; red clay, 6 inches; coarse sand, 2 feet; red clay on top, 4 feet.

to serve as a guiding line for travellers when crossing the bare gravel plateau, to and from the banks of the Tang Ho, at the time of violent dust-storms such as sweep across the desert with great frequency in the spring and summer. Incidentally, the embankment was supposed to afford some protection from the force of the specially dreaded gales that blow from the north-east or north. This may probably account for the name *fêng ch'iang*, 'wind wall', by which the embankment is now known to the Nan-hu people. Whether this designation is old, and whether the interpretation I heard of it rests on some kind of tradition, I have no means to decide. If correct, it would furnish for that strange dyke an explanation which archaeologically seems *a priori* admissible. The need of guarding travellers from the serious risk of straying off the track and losing themselves in waterless desert during violent sand-storms is proved by the measures that the present Chinese administration has taken to mark the 'high road' across desert stretches, both east and west of Khotan, with lines of closely-set poles.[5] It was forcibly brought home to me more than once by personal experiences of travel on desert routes of the Tārīm Basin.

Suggestion of defensive line.

But there is another possible explanation of this curious embankment running across the desert which deserves attention here. The site of Nan-hu must, as we shall presently see, be identified with the ancient *Yang kuan*, or 'Yang barrier', of Han times, and the connexion of the westernmost Limes with Nan-hu is proved by a secondary line of wall traceable south-east from T. XIV, the ancient station of the 'Jade Gate', or *Yü-mên*, towards the end of the formerly cultivated area of Nan-hu.[5a] The question, therefore, necessarily suggests itself whether, in the dyke stretching across the gravel plateau to the natural fosse of the Tang Ho, we ought not to recognize the remains of a defensive line intended to protect the 'Yang barrier', and with it the westernmost Limes, from attack in the rear. The utility of such protection could not be denied *a limine*; for, when discussing above the 'southern route' leading in Han times from Tun-huang to Shan-shan or Lop, I have had occasion to point out that this route, corresponding to the present *tāgh-yol*, or 'mountain route', between Tun-huang and Lop, passed near to the territory in the K'un-lun held by the Jo Ch'iang tribe.[6] Together with other nomads on the high plateaus to the south of Tun-huang, such as the Little Yüeh-chih, they must have remained a potential source of trouble.[7] Nor does the assumption appear altogether impossible that the embankment may, as Mr. Littledale thought, represent the remains of a completely decayed 'Chinese Wall'.

Arguments against defensive character.

Yet there are weighty arguments to be urged against such a view. Most important is, I think, the fact that the remains in question differ wholly in construction from those of any other wall on this westernmost Limes. On repeatedly examining the embankment I failed to trace in it any of those layers of fascines which elsewhere are the most characteristic feature of the wall in the Tun-huang region. Yet the materials for such fascines in the form of tamarisk brushwood and reeds could be secured in abundance both from the Nan-hu basin and from the gorge of the Tang Ho. Then again the total absence of remains of watch-towers along the embankment, apart from the one at its western end, is a very significant indication. It must further be noted that, if the line was intended to defend the road to Tun-huang from attacks on the south, we might reasonably expect it to start from the ruined circumvallation, which clearly goes back to Han times, and not from a point considerably to the north of it. The same observation also applies, and with increased force, to the position of the line relative to the area of graves which, as already related, I found extending on its south where the edge of the Nan-hu basin is approached. Had the line been laid

[5] Cf. *Ruins of Khotan*, p. 180; *Ancient Khotan*, i. p. 468; Hedin, *Reisen in Z.-A.*, p. 202.

[5a] See chap. XIX. sec. iii.

[6] Cf. above, p. 418; Chavannes, *T'oung-pao*, 1905, pp. 526 sq., note 8.

[7] For relations attested by the Han Annals between the Jo Ch'iang and the Huns down to A.D. 2, cf. Chavannes, *T'oung-pao*, 1905, p. 527, note 8.

down for purposes of defence, it appears to me very unlikely that the burial-grounds of the Chinese garrison should have by design been placed to the south, and thus outside the wall, or *kuan wai-t'ou*.

Probable purpose of *agger*.

Taking all these considerations together, I find it easier to accept the local view, which after all *may* be based on tradition, and to recognize in that broad gravel embankment not a defensive *agger* but a guiding line. In any case it is clear that the construction of such an embankment for close on twelve miles through the desert was a work of considerable magnitude. It seems safe to assume that it would never have been undertaken except at a period when the Nan-hu oasis and its population were far greater than at present, and even then only because the settlement there situated, the ancient frontier station of *Yang kuan*, was one of particular importance.

Ancient burial-ground.

Before giving the reasons for this identification of Nan-hu with the 'Yang barrier', I may briefly record here what I observed on a further inspection of the burial-ground passed on my first approach to Nan-hu. Besides a widely-scattered series of small circular mounds, rising only a few feet above the level expanse close by a narrow handle-like ridge of gravel, I visited the quadrangular enclosure of which I have already spoken. It contained two tumuli placed side by side near to its north face and both turning their 'handles' due south towards the gate meant to give access to it. Whereas the lines of heaped-up gravel that marked the enclosing walls were so low as to be barely visible while the sun stood high, the western tumulus showed an annular rim about three feet high with a slight depression in the centre (Fig. 165). The diameter of the whole was about twenty-three feet. The low gravel ridge, forming the 'handle' southward, had a length of about seventy-five feet, with a width of about two feet where it was widest. In the centre of the north segment of the annular tumulus a small heap of stones lay around and over a lump of red clay, similar in material to the sun-dried bricks of the gate to be described presently. A cutting was made through the low tumulus right down to the natural soil of gravel and hard clay without disclosing any remains whatsoever. I now regret that I did not test the gravel ridge of the 'handle' in the same way, for, from what my later experience at the T'ang burial-grounds of Turfān showed, it is highly probable that we should have struck there the top of the deep-cut trench by which the tomb, carved out from the solid clay at some depth below the tumulus, was approached when the deposition of the body or bodies took place.

'Gate' to grave enclosure.

The 'gate' on the south consisted of two fragments of wall about five feet thick, and built of coarse bricks with an average size of nineteen by ten inches and a thickness of four inches. It is possible that what I took for bricks at the time were only fairly uniform pieces of hard clay which had been cut out from some stratified alluvial deposit near the dry river-bed, or obtained in the course of the excavation made for the tomb chambers below the tumuli. The wall to the west of the entrance was badly broken, but the one to the east still rose to about fourteen feet in height. Its length was five and a half feet, and this was continued eastwards for another three and a half feet with a reduced thickness. Close by the north and south faces of this wall was a narrow, terrace-like platform about two and a half feet wide and four feet high. I have already stated the reasons which obliged me to abstain from any attempt to search these burial-places, and without actual excavation their date cannot be definitely established. But comparison of their surface features with those which in 1914 I observed at the cemeteries of the Turfān region makes me inclined to believe that these graves near Nan-hu cannot be later than the T'ang period.

SECTION IV.—THE POSITION OF THE 'YANG BARRIER'

Identification of Nan-hu with 'Yang barrier'.

After this survey of the old remains actually traced at Nan-hu it remains for us to consider whether the ancient frontier station west of Tun-huang, which under the name of *Yang kuan* 陽關, the 'Yang barrier', repeatedly figures in the Han Annals side by side with the more famous 'barrier of the Jade Gate' (*Yü-mên kuan*), is really to be located at this site. I found the claim to this proud identification put forward in a modern stone inscription which some learned Tun-huang Mandarin of antiquarian tastes had set up by the side of a small shrine, between the south face of the ruined shrine and the artificial lake feeding the Nan-hu canals. Topographical and antiquarian observations, gathered in the course of my explorations on the Tun-huang Limes, made this location of the 'Yang barrier' appear to me distinctly probable at the time, and the examination of all Chinese records at present accessible to me in translation has since confirmed me in this belief. The references to the Yang barrier contained in the Former Han Annals are so closely bound up with those made there to the 'Jade Gate' that their evidence can be properly utilized only if we take into full account the results which my explorations along the westernmost Limes, by combined archaeological observations and documentary finds, have established as to the true position of the Yü-mên barrier. The discussion of these results must necessarily be left for a subsequent chapter.[1] It will, therefore, be more convenient here to start, in our inquiry as to the position of the Yang barrier, from what later Chinese records can tell us.

Yang barrier at Shou-ch'ang hsien or Lung-lo.

These records are scanty enough; but there is fortunately among them one precise and distinctly helpful. According to a passage of the *Old T'ang Annals* quoted by M. Chavannes,[1a] the Yang barrier was situated 6 li to the west of the sub-prefecture of Shou-ch'ang 壽昌, whereas the Yü-mên barrier was 118 li to the north-west of the same place. We learn from the passage also that the Shou-ch'ang sub-prefecture was the one known as *Lung-lo* 龍勒 under the Han which lay roughly south-west of Tun-huang.[2] That Shou-ch'ang is represented by the present oasis of Nan-hu is made quite certain by a passage of the *Tun-huang Lu*, a short geographical treatise on the Tun-huang region composed towards the close of the T'ang period, which Dr. L. Giles has translated from a manuscript found among the great collection of Chinese texts I secured at the 'Thousand Buddhas' of Tun-huang, and to which I shall have repeated occasion to refer hereafter.[3] In this passage we find the river of Tun-huang, here called *Kan-ch'üan* ('sweet spring'), the present Tang Ho, spoken of as entering the Tun-huang district through the territory of Shou-ch'ang hsien in the south-west, and a glance at the map shows that by this *hsien*, or district town, must be meant the present Nan-hu. There is no other tract near the course of the Tang Ho which during historical times could have supported a settled population such as the establishment of a *hsien* presupposes.

Nan-hu ruins mark Shou-ch'ang hsien.

The location of Shou-ch'ang at Nan-hu is fully confirmed by Dr. Giles from other Chinese records:[4] 'Shou-ch'ang hsien, called after the Shou-ch'ang, a lake south of the town, was founded in [A.D.] 521 on the site of the ancient Lung-lo, but a few years later was incorporated in Ming-sha hsien [a designation of the Tun-huang district under the Later Chou dynasty, A.D. 557–81]. In 619 it was again established, and after a chequered existence definitely disappeared before the close of the T'ang dynasty.' The reference here to the lake south of the town is of particular interest, as it proves that Shou-ch'ang hsien must have occupied the same position as the ruined town of Nan-hu.

[1] See below, chap. XIX. sec. i, ii.

[1a] See Chavannes, *Dix inscriptions chinoises de l'Asie Centrale*, p. 67, note 2; also M. Chavannes' extract from the *T'ang shu*, chap. XLIII. b, in Appendix *A*.

[2] Cf. Giles, *Tun Huang Lu*, *J.R.A.S.*, 1914, p. 715.

[3] Cf. Giles, *loc. cit.*, p. 712; for notes on the character and origin of this short but valuable text, *ibid.*, pp. 703 sqq.; also below, chap. XIX. sec. vii; chap. XXVI. sec. i.

[4] See Giles, *loc. cit.*, p. 712.

Moreover, the archaeological evidence which I gathered at the site fully accords with the fact that Shou-ch'ang hsien is spoken of as 'extinct' in the *Huan yü chi*, a Chinese text published between A.D. 976 and 983, which Dr. Giles quotes in continuation of the above extract. Accepting then the identity of the extant ruined town at Nan-hu with the Shou-ch'ang hsien of the *Old T'ang Annals*, we are justified in concluding that the Yang barrier must have stood close to the western edge of the present Nan-hu oasis.

If we test that location by the reference which the passage quoted by M. Chavannes from the *Old T'ang Annals* makes to the position of the Yü-mên barrier, we find it in full agreement with topographical and archaeological facts. The 'Jade Gate' is there placed 118 li to the north-west of Shou-ch'ang hsien, and a reference to the map shows that the ruined station T. XIV (Map No. 74. D. 3), which conclusive archaeological and documentary evidence proves to mark the position of the 'Jade Gate' during the period while the Limes was occupied in Han times, lies almost exactly to the north-west of the ruined town of Nan-hu, and at a direct distance of about thirty-six miles. The discoveries which enable us to fix the position of the 'Jade Gate' on the ancient Limes will be found discussed below.[4a] There, too, will be the right place to explain in detail how striking a confirmation for the location of the Yang barrier at Nan-hu was furnished by the discovery of an ancient secondary line of wall which leaves the main Limes at T. XIV and strikes across the desert to the south-east, exactly in the direction of the terminal area of Nan-hu cultivation as marked by the towers T. XVIII. a, b (Map No. 78. A. 4).[5] In the light of what we now know as to the position of the Yang barrier, it appears to me highly probable that the purpose of this secondary wall with its watch-towers was to assure the safety of the line of communication linking up the two important 'barriers', or frontier stations, of Yang and Yü-mên. Location of 'Yang barrier' at Nan-hu.

The close connexion between these two frontier stations and their nearness to each other is also clearly brought out by the references made to them in the Former Han Annals, though by themselves, and without the aid of archaeological investigation on the spot, these references would not allow us to fix the positions with exactness. The 'Jade Gate' and the 'Yang barrier' are mentioned together, in Chapter XCVI of the *Ch'ien Han shu*, as the starting-points for the two roads to the Western Regions which we have already had occasion to discuss.[6] The fact that both are stated to be some 300 li distant from the P'u-ch'ang Lake, or Lop-nōr, implies, as Dr. L. Giles has rightly recognized, that the two were at no great distance from each other.[7] No direct topographical indication is furnished by the statement made in the same chapter that the two 'barriers' were established at the time when, soon after the conquest of westernmost Kan-su in 121 B.C. under the Emperor Wu-ti, the newly-won territories were colonized and divided into four commands (*chün*) including Tun-huang.[8] But another passage, in Chapter XXVIII of the *Ch'ien Han shu*, supplies the important information 'that the Yang and Yü-mên barriers were both in Lung-lo hsien',[9] i.e., as we have proved above, in the Nan-hu tract. References to *Yang kuan* and Yü-mên in Former Han Annals.

The Han Annals, as far as they are accessible in translation, do not contain any explicit statement about the relative position of the two frontier stations within this tract. But fortunately there is a passage in them which, if it is read with proper attention to the geographical facts established by our surveys, makes it perfectly clear that the Yang barrier must have been situated in the south, Identity of *Yang kuan* with Nan-hu proved.

[4a] See chap. XIX. sec. i–iii.

[5] See below, chap. XIX. sec. iii. In Map No. 74. D. 3 the secondary line of wall is wrongly shown as running south from T. XIV. Its continuation to the south-east was duly traced by me in 1914 for some distance. In Pl. 33 the direction of this wall is indicated somewhat more correctly.

[6] See Wylie, *J. Anthrop. Inst.*, x. p. 21; cf. above, pp. 333 sq., 345, 418, note 11.

[7] Cf. Giles, *Tun Huang Lu*, *J.R.A.S.*, 1914, p. 715.

[8] Cf. Wylie, *loc. cit.*, x. p. 22; Chavannes, *Documents*, pp. v sq., note 5, where the dates indicated by other passages of the Annals for these measures are critically examined.

[9] Cf. Giles, *J.R.A.S.*, 1914, p. 715.

and within or close to the present Nan-hu oasis. In Chapter XCVI of the *Ch'ien Han shu* we are told: 'After leaving the Yang barrier the first people which one meets on advancing are the Jo Ch'iang. . . . This people is 1,800 li from the Yang barrier and 6,300 li from Ch'ang-an; they live retired to the south-west and are not on the high road [from Tun-huang to Shan-shan or Lop].'[10] As we are subsequently told that the mountain territory of the Jo Ch'iang borders upon Shan-shan and Chü-mo, i. e. Lop and Charchan, it is certain that this nomadic people occupied the high grazing grounds south of the Āltin-tāgh, especially the wide valleys of the Chimen-tāgh now held by Mongols. It is equally beyond doubt that the most direct and easiest line of access to them from the side of Tun-huang is the present *tāgh-yol*, or 'mountain route', leading from Tun-huang along the high northern slopes of the Āltin-tāgh and actually passing through Nan-hu.[11] On this route the only ground which could ever in historical times have possessed cultivation and local resources to any appreciable extent is the present oasis of Nan-hu,[12] and this fact fully accounts for the location there of the Yang barrier, which we may now, in view of all this concordant evidence, accept as definitely established.

Geographical reasons for two 'barriers'.

The existence side by side of two frontier stations, the 'Jade Gate' and the 'Yang barrier', on the ancient routes leading to the Western Regions from Tun-huang has been the subject of a good deal of learned speculation.[13] But in this case, as in that of other similar questions, it is possible to arrive at a clear solution only if due attention is paid to essential geographical facts, as established by adequate surveys, and if these are supplemented by archaeological investigation on the spot. The establishment of *two* main frontier stations, the 'Jade Gate' to the north-west and the *Yang kuan* to the south-west, became necessary, as soon as Chinese administrative control was extended beyond Tun-huang towards the close of the second century B. C., on account of the plain geographical fact that *two* divergent routes of importance leading to the Western Regions required to be watched and guarded. One of them, and this the more important, was the ancient Lou-lan route, which passed along the westernmost portion of the Han Limes, and which has been fully discussed in previous chapters. This, as we shall see, was effectively barred by the military station of the 'Jade Gate' and the smaller watch-posts along the Limes controlled from it. The other route, corresponding to the present *tāgh-yol* of the Lopliks, passed south-west to the slopes of the Āltin-tāgh. For the frontier-station of the 'Yang barrier', which was intended to guard it, Nan-hu offered a position recommended by every geographical consideration.

Strategic importance of Nan-hu.

The Chinese commanders who directed the Emperor Wu-ti's policy of Central-Asian expansion with so keen an eye for topography, as the alignment of their Limes proves, could not possibly overlook the strategic advantages of a firm hold upon Nan-hu. The route leading along the high barren slopes of the Āltin-tāgh, though practicable all the year, offers difficulties, through the scarcity of water and grazing, almost as great as the route by the Lop desert. In support of this statement I may refer to the description of Mr. Littledale, who was the first European to follow it in modern times, and to the short but graphic account left by the Chinese embassy to Khotan which about A. D. 938–39 passed from Tun-huang through these desert mountains towards Lop or Charchan.[14]

[10] I follow the translation given by M. Chavannes, *T'oung-pao*, 1905, pp. 526 sq., note 8; cf. also Wylie, *J. Anthrop. Inst.*, x. p. 23.

[11] Regarding this 'mountain route', the ancient 'southern route' of Han times, also described in the *Wei lio*, cf. above, pp. 320, 418. Its line from Tun-huang towards Mīrān and Lop is shown in Maps Nos. 79, 75, 71, 68, 64, 61.

[12] At Somoto, the next stage on the *tāgh-yol* beyond Nan-hu (Map No. 75. D. 1), there is only a tiny plot of cultivation, maintaining one or two Chinese families, and not enough water for more. Its occupation is solely accounted for by the passage of traders bringing wool from the Mongol camps about Anambar-ula, etc.

[13] Among recent discussions it may suffice to refer, e. g., to Herrmann, *Seidenstrassen*, pp. 107 sqq.; for earlier conjectures, see e. g. Richthofen, *China*, i. pp. 460, 495 sq., notes.

[14] For Mr. Littledale's experiences cf. *Geogr. Journal*, 1894, iii. pp. 455 sqq. The passage of the Chinese embassy

Nan-hu, for those wishing to approach Tun-huang by this route from the side of Lop or Tsaidam, is the first place where water and grazing are obtainable in abundance, and by holding Nan-hu it would be possible to ward off practically any raid which might be attempted upon Tun-huang from the Āltin-tāgh. The distance to be covered from Anambar (Khanambal), the last place where some real grazing is available, is so great, and the intervening glacis of stony and gravel 'Sai' so utterly devoid of resources, that no force coming from that side could move upon Tun-huang without giving its animals first a good rest at Nan-hu. Considering what we know about the Jo Ch'iang and their nomadic successors, the Chung-yün, the importance for the Chinese of controlling this route by the 'barrier' established at Nan-hu is obvious.[15]

Natural defences of Nan-hu.

The barring of the route at Nan-hu was greatly facilitated by the natural obstacles which the ground to the west and south of the oasis presents. In both directions, but especially westwards, extends a wide area of high dunes, which also cover the slopes of the low ridges cropping up over the underlying gravel glacis (see Maps Nos. 79. A, B. I ; 75. C, D. I). Progress among these dunes is distinctly troublesome on the track between Somoto and Nan-hu,[16] and practically impossible for horses further north, where in May, 1907, the high sands frustrated Surveyor Rām Singh's attempt to reach Somoto from the terminal basin of the Su-lo Ho. Thus Nan-hu was naturally defended from the west, where, in the absence of such protection, Hun raiders and others might have attempted to turn the western flank of the Limes line by getting round the marshy basin just mentioned. We shall see further on that the protection thus afforded to the flank chiefly determined the policy of making the Limes end at that basin. We find this great belt of dunes west and south-west of Nan-hu specially mentioned, in the report of the Chinese mission which passed here in A. D. 938–39, as the 'Sands of *Yang kuan*'.[17] The use of this designation is of particular interest because it indicates the survival, at a relatively late period, of a genuine local tradition connecting the 'Yang barrier' with Nan-hu.

Name of *Yang kuan* explained in *Tun Huang Lu.*

It only remains for me briefly to notice what I can gather from accessible Chinese records about the name *Yang* given to this ancient frontier-station. In the Han Annals and the historical texts elucidated by M. Chavannes I can find no explanation of the origin of the name. But in the *Tun Huang Lu*, the short treatise on the Tun-huang region, translated by Dr. Giles,[18] which I have mentioned above, we read the following curious passage : 'West of the city [of Tun-huang] is the Yang Barrier, which is the same as the ancient Yü-mên (Jade Gate) Barrier. It was because Yang Ming, when Governor of Sha-chou, resisted an Imperial warrant for his arrest and fled over the border by this gate, that it afterwards came to be known as the Yang Barrier. It connects China with the capital of Shan-shan, but the natural obstacles of the route and its deficiency in water and vegetation make it difficult to traverse. The frontier-gate was afterwards shifted to the east of Sha-chou.' In judging of the critical value which may be attached to this statement, it should be remembered that the little treatise which furnishes it was composed probably close on a thousand years after the two frontier-stations on the routes leading westwards from Tun-huang were first

of A. D. 938–42 west of Tun-huang is described in the record extracted from the *Pien i tien*, Rémusat, *Ville de Khotan*, pp. 78 sq.; cf. also Richthofen, *China*, i. p. 536, note; *Ancient Khotan*, i. p. 178; above, p. 320.

[15] The report on the Chinese mission to Khotan of A.D. 938–42 specially emphasizes the dread in which the Chinese of the Tun-huang region held the bold raids of the Chung-yün, then supposed to be descended from the remnants of the ancient Yüeh-chih, the later Indo-Scythians; cf. Rémusat, *Ville de Khotan*, p. 78.

It is worth noting that at the time of that mission the Nan-hu hsien was probably already abandoned; see above, p. 621, and Giles, *J.R.A.S.*, 1914, p. 712.

[16] Cf. Mr. Littledale's brief account of this march, *Geogr. Journal*, 1894, iii. p. 458.

[17] See Rémusat, *Ville de Khotan*, p. 78. By the river Tu-hsiang, there said to be passed west of Sha-chou and before the 'Sands of *Yang kuan*', the Tang Ho must be meant.

[18] See Giles, *J.R.A.S.*, 1914, pp. 715 sqq.; also his re-translation, *J.R.A.S.*, 1915, p. 45.

established, and, further, that it is mainly a collection of local folk-lore stories bearing on the *mirabilia* of the district, interesting in various ways, but not a text to be accepted as a source of reliable historical information.

Other derivation of name *Yang*.

As regards the origin here given for the name *Yang*, Dr. Giles himself has rightly observed that it 'does not seem a very probable derivation'. The author of the only other Chinese text, the *T'u shu chi ch'êng*, in which Dr. Giles has been able to trace a reflex of this story, seems, in fact, to have entertained a similar critical misgiving.[19] The suspicion that we may be dealing here with a local 'popular etymology' of the quasi-learned variety so common in all regions is strengthened by the fact that the *T'ung Tien*, a Chinese text, of which Dr. Giles quotes a passage from a source not specified, gives quite a different derivation: 'The Jade Gate is in the north of the *hsien* (Lung-lo), and the Yang Barrier is south of the Jade Gate; that is why it is called *Yang* (the quarter of light and warmth, i. e. south).'[20] This etymology, too, seems to me to smack of a learned origin, if a non-Sinologist may be allowed to express an opinion on the subject.

Statements about Yang kuan in *Tun Huang Lu*.

There still remain for our consideration two statements of the *Tun Huang Lu*: one which places the Yang barrier west of Tun-huang city, and the other which declares it to be 'the same as the ancient Yü-mên Barrier'. As regards the first, the fact that no distance is stated makes it impossible for us to determine with certainty whether popular tradition at Tun-huang, towards the close of the ninth century A. D., still located the Yang barrier at Nan-hu, or at some point closer to Tun-huang town. In any case, by that time the *quondam* frontier-station must have long lost its original significance. Even at the commencement of the T'ang period, as we know from the *Life* of Hsüan-tsang, the western gate station of the empire, the *Yü-mên kuan* of those times, was established north of Kua-chou and not far from the present An-hsi,[21] and the Tun-huang tract had thus passed *kuan wai-t'ou*, or 'outside the Wall'. We find this transfer also duly noted in the concluding remark of the above-quoted passage of the *Tun Huang Lu*.

Yang and Yü-mên barriers wrongly identified.

The second of the statements I have singled out from this text for attention seems to imply that, at the time when it was written, popular local opinion at Tun-huang identified the 'Yang barrier' with the Jade Gate. It is impossible to discuss this statement of the *Tun Huang Lu* without going also into the question of the successive positions occupied by the Jade Gate. Hence its consideration may be left until a subsequent chapter, where I shall have occasion to examine the earliest traceable site of the Jade Gate in the light of the archaeological evidence furnished by my explorations along the westernmost Limes. Here it must suffice to mention that, in view of what combined geographical and archaeological facts conclusively prove as to the quite distinct original purposes and positions of the two 'barriers' of Yang and Yü-mên, I am unable to attach to this statement of the *Tun Huang Lu* the special historical value which Dr. Giles is inclined to assume for it in his otherwise very helpful comments.[22]

Section V.—ABANDONED VILLAGE SITES NORTH OF NAN-HU

Start from Nan-hu northward.

On April 11 I left Nan-hu in order to regain the Limes line through the desert northward. The collection of ten additional labourers, the maximum contingent which the little oasis could spare, had cost so much time that the start was delayed until noon. The route we followed, under the guidance

[19] Cf. Giles, *J.R.A.S.*, 1914, p. 717. The name of the Han general who is supposed to have fled through this gate after his defeat is there given as *Yang Hsing*.

[20] See Giles, *J.R.A.S.*, 1914, p. 716.

[21] Cf. Julien, *Vie*, pp. 17, 21; Chavannes, *Dix inscriptions*, p. 67, note 2. [See now my paper, *The Desert Crossing of Hsüan-tsang*, *Geogr. Journal*, 1919, liv. pp. 270 sq.]

[22] Cf. Giles, *J.R.A.S.*, 1914, p. 715: 'This is a most interesting statement. Even if made at random or without full appreciation of what it involves, it furnishes, I venture to think, a valuable clue to the mystery which has hitherto surrounded the relation between these two famous frontier gates.'

of the old villager previously mentioned, led beyond the last fields of Nan-hu up to the low ridge of detritus which flanks the gorge cut by the Nan-hu 'Yār' from the west. A ruined watch-tower, about twenty-three feet square at the base and twenty feet high, built of rough bricks measuring about nineteen by ten by five inches, formed a conspicuous landmark on the top. The fact that thin layers of tamarisk brushwood were inserted in the brickwork after every four or five courses suggested antiquity. Here we were overtaken by a violent sand-storm, which made it difficult to see ahead or even to keep one's eyes open, and obliged us to halt at the tiny, half-abandoned hamlet of Shui-i after a total march of about five miles. In my Personal Narrative I have described the effect which these storms, particularly frequent in the spring, have upon ground such as that in most of the desert west of Tun-huang.[1] A perfect hail of small pebbles and of coarse grains of sand is driven along the surface and through the air to some height above it. But there are not enough fine particles left to be carried far up into the atmosphere and to form thick dust-clouds, such as would spread darkness in the Taklamakān or at the western oases of the Tārīm Basin; hence, through a yellow haze above, the sun remains visible all the time.

Effect of sand-storm.

The enforced night's halt at one of the three half-ruined farms of Shui-i was compensated by observations of a quasi-archaeological interest, which will be found detailed in the account of *Desert Cathay* already referred to. In the light of the following morning it was easy to see that not the tumble-down refuse-filled buildings alone, but also the fields and arbours around them, bore plain marks of approaching abandonment. The fields, though still cultivated, were being overrun by light drift-sand. Irrigation was not sufficient to keep off the low dunes moving up from the west—skirmishers, as it were, thrown out by the serried array of high sands which envelops the whole Nan-hu depression from that side. They had already covered the feet of the trees standing in rows some 300 yards off the homestead which had afforded us shelter, and the shallow channels carrying water to them appeared likely to get choked. Elsewhere I could see fields overgrown with thorny scrub, threshing-floors edged round by low dunes, or small orchards, once neatly laid out, where the drift-sand now lay several feet deep along the fences. The cuts needed for irrigation looked sadly neglected. Half a mile or so to the south-west an avenue of large trees marked the small outlying oasis of Hsi-yüan, where two holdings were said to be still occupied. The area intervening between it and Shui-i seemed to have been cultivated until recent times. But the prevailing practice of cutting down for timber all trees no longer irrigated had removed such evidence as could easily be observed from a distance.

Approaching abandonment of *Shui-i*.

In the farm-houses, originally built in a substantial style with plenty of solid timber, advancing decay was only too plainly proved by walls leaning over in a dangerous fashion, half-broken roofs, etc. Not far from the main farm a small ruined shrine still kept its painted gateway. The beams of the roof had fallen, and the drift-sand caught within the walls had almost completely smothered what remained of the gaily-painted clay images. An air of hopeless decay hovered over the whole of Shui-i, and it needed but little antiquarian imagination to call up the picture it will present when the desert shall have finally claimed it. Thus, I thought, *mutatis mutandis*, the hamlets of Dandān-oilik or the Niya Site must have looked during the last decades preceding their final abandonment. The rubbish-heaps accumulated at Shui-i seemed to hold out promise of useful 'finds' to the archaeologist who may have to clear them, say two or three thousand years hence. Here the modern Chinese custom of collecting all torn pieces of writing in special receptacles and then burning them was certainly in abeyance—and from consideration for that confrère far off in the ages I, too, purposely refrained from burning my own waste paper!

A future 'old village site'.

[1] See *Desert Cathay*, ii. pp. 83 sqq.

Probable causes of abandonment.

The signs of far-advanced decay were too obvious here to be denied by the villagers. But their usual evasive reticence made it difficult to elicit from them any definite statements about the cause of this decay. They did not attribute it to want of water or to uncertainty in its supply, but talked vaguely of the difficulty of coping with the sand and of the devastation which had attended the raids of the Tungan rebels. Want of adequate labour for safeguarding cultivation in these outlying portions of the Nan-hu oasis seemed an important, if not the main, cause of trouble, and in this want, at any rate, a lasting effect of that great catastrophe can be recognized with certainty. The extent of the depopulation then brought about was strikingly demonstrated by further observations made on the day's march, which proved in fact a very instructive antiquarian lesson.

Abandoned hamlets N. of Shui-i.

For this I was little prepared, since the Nan-hu people, when before questioned, had stoutly denied any knowledge of a route through the desert northward and of ruins to be found along it. Yet we had followed the lively stream which carries the drainage of the Nan-hu 'Yār' down past the Shui-i fields, as previously mentioned, for only about a mile and a half when I noticed a fairly large but scattered group of houses, not far from its east bank and encircled by small dunes. The crest of these dunes rose nowhere to more than about eight feet, but the cut tree-trunks in what were once adjoining arbours or fenced fields, as well as the dismantled condition of the houses, showed that occupation here had been definitely abandoned. 'Chiang-huan', the old Nan-hu villager, who had acted as my guide before within the oasis, and whom I had engaged to look after our local contingent of labourers, now acknowledged that he knew quite well these deserted homesteads of Shang-Yen-chia, or 'Upper Yen-chia' (Map No. 79. A. 1), and those of Hsia-Yen-chia, or 'Lower Yen-chia' (Map No. 78. A. 4), which we passed after another mile and a half to the north-north-west. He definitely asserted that the two hamlets had been abandoned in consequence of the desolation wrought by the great Tungan inroad of T'ung-chih 4, i. e. A. D. 1866, when Nan-hu was sacked and the greater part of the population killed. Since then those who reoccupied the main oasis, new colonists in the main brought from the interior of China, had carried off beams and posts from the ruined dwellings when they were in need of timber or dry fuel, and the trees once growing around them had been cut down for the same purpose.

Water available for cultivation.

It was curious to note how the drift-sand, here fine and evidently composed of eroded clay or loess, had accumulated over what was once cultivated and, potentially, still fertile ground. Obviously the trees, fences, walled enclosures, and other obstacles had helped to retain it, while to the west of the stream there stretched away the gravel 'Sai' long before swept perfectly clear of any cover of fertile soil that its surface may have had during some earlier period. The stream flowing past the long strips of old cultivation still carried about twenty-two cubic feet of water per second where I measured it near Shang-Yen-chia, a volume amply sufficient for bringing them under irrigation again. A little below Hsia-Yen-chia this stream emptied itself into a sheet of water, about one mile long and from a quarter to half a mile wide, which now represents the terminal basin of the drainage from the springs of Nan-hu. This lake is likely to have been much larger at one time; for it occupies only the middle of a well-marked dry depression, lying fully sixteen feet below the level of the flat gravel 'Sai'.

Deserted settlement of Kuan-tsou.

That canals, probably fed by the drainage of springs rising in the now dry river-bed east of the ruined town of Nan-hu, must within living memory have carried water much further to the north was proved when, after covering about six and a half miles from Shui-i, I reached the southern edge of another abandoned settlement. My 'guide' from Nan-hu knew it by the name of Kuan-tsou, and declared that, according to local tradition, it had been deserted earlier than Yen-chia and about sixty years before my visit. The hamlets composing this settlement were represented by scattered groups of farm dwellings, extending for close on four miles to the north-west and all in an advanced

state of ruin. The houses in the southern group were mostly filled with drift-sand up to a height of six to eight feet, and some still retained a good deal of timber. Near one of the farms there visited (Fig. 164) I found some patches of ground that were not covered by sand, and among the small débris scattered over them modern-looking fragments of porcelain, bronze, etc. (Nan. K. 001–9) were soon picked up. Definite chronological evidence in support of the local tradition concerning the abandonment of this 'site' was supplied by finds of copper coins, including two pieces of Ch'ien-lung (A. D. 1736–96), besides one of K'ang-hsi (A. D. 1662–1723) and one of Hsien-p'ing (A. D. 998–1004). A tamarisk-cone, about twelve feet high, which rose amidst the low dunes close to this particular farm, evidently went back to a period of abandonment far earlier than the present, and suggested that the ruined homesteads had been built on ground which for centuries before had remained unoccupied. It is possible, and even probable, that this area had more than once passed through those vicissitudes of periodical occupation and abandonment of which I had observed evidence around Domoko.[2]

Last ruins of abandoned settlement.

I was strangely reminded of my first visit to 'Old Domoko' in 1901 when I saw, rising above the light drift-sand, the trunks of the trees which once grew in orchards and along irrigation channels, and which had all been cut down since cultivation was abandoned. A clearly-marked main canal bed, traceable for a considerable distance by the double row of trunks along its banks, showed plainly that the water of this settlement must have been brought from the south-east, i. e. from the now dry river-bed passing east of the ruined town of Nan-hu and the adjoining 'Tati' area. Further on dunes grew less frequent, and on bare clay ground a small group of houses was passed almost clear of sand (Fig. 163). As in almost all these modern ruins, its bricks were of small size (12″ × 6″ × 2″), laid flat and on edge in the characteristic alternate courses. To the north-east, half a mile or so off, a small temple was sighted. Ruins of detached holdings were met with at rarer intervals until the last was reached after close on four miles' progress north-westwards through what were once the village lands of Kuan-tsou. It was a substantial homestead as seen in Fig. 162, with a thick layer of refuse covering the courtyard. A big dune, over twenty feet high, rose with its concave slope close by on the north and had covered outlying parts of the building. Two copper coins of Ch'ien-lung (A. D. 1736–96), found near the eroded foot of the walls, proved that the period of abandonment was the same here as in the other part of the settlement.

Desiccation proved since abandonment.

Everything showed that at Kuan-tsou a typical 'site' was in preparation to illustrate to posterity the conditions of Tun-huang village life early in the nineteenth century. All the farms that I had passed or sighted lay along a narrow belt stretching from south-south-east to north-north-west. It appeared to me highly probable that, like the final offshoots of the present Tun-huang oasis which stretch finger-like northward, it had received irrigation from a single canal, the one already noticed as coming from below Ku-tung-t'an and marked in the map (No. 78. A. 4). Here a case of recent progress of 'desiccation' seems to me clearly established; for the water-supply now obtainable from the springs that rise in the part of the dry river-bed lying north-east of the ruined town of Nan-hu only amounts to twenty cubic feet per second where I measured it near the hamlet destroyed by the flood of 1893,[3] a volume which could not be conducted so far over ground of this character, where water is particularly exposed to absorption and evaporation. The distance intervening between that hamlet and the northernmost farm of Kuan-tsou is fully ten miles in a straight line. Nor can it be supposed that Kuan-tsou before its abandonment, say about 1840, had been in sole receipt of the whole water-supply available in the Nan-hu depression; for it is quite certain that the main oasis was cultivated at that time at least as much as at present, and so

[2] Cf. *Ancient Khotan*, i. pp. 458 sq.; also above, pp. 202, 207. The approximate date preserved by local tradition for the final abandonment of 'Old Domoko' is about 1850.

[3] See above, p. 614.

also, in all probability, were both Upper and Lower Yen-chia. That the abandonment of Kuan-tsou took place just about the time when cultivation in the Domoko area was shifted from Old Domoko to the present main village is certainly curious. But the great distance separating the tracts of Nan-hu and Domoko, and still more the detailed observations recorded above as regards the peculiar conditions affecting the shifts of cultivation in the latter tract,[4] must warn us against any hasty conclusions which might be drawn from the synchronism of these local changes.

Watch-towers north of Kuan-tsou.

No traces of cultivation were met with on the bare clay steppe beyond, but a well-marked shallow depression, with living tamarisks and signs of water-erosion of somewhat recent appearance, continued north-westwards and suggested that at rare intervals floods from the mountains, coming down the dry bed of the river of Nan-hu, may penetrate here some way into the desert. At a distance of about two miles from the last farm a much-decayed watch-tower (shown as T. XVIII. b in Plate 33) was reached, which rose as a conspicuous object on a slight swelling of the barren plain and seemed to be known to some of the Nan-hu people by a name like *Wa-shih-tun*.[5] Measuring about twenty-three feet at the base and still rising to a height of nineteen feet, it was built with solid layers of stamped clay, about two inches thick, just like several towers that I had noted along the ancient Limes. I regret now that I did not examine it more carefully and ascertain whether there were also the usual thin layers of brushwood inserted at regular intervals after a succession of courses. Far away to the north another ruined tower was visible.[6]

Extension of Nan-hu cultivation.

At the time it seemed difficult to account for the position and purpose of these towers. But subsequent discoveries[7] have suggested the explanation that they may have been connected with the subsidiary Limes which I found running south-south-east from the ruined fort T. XIV, marking the position of the ancient Jade Gate, and which was, no doubt, intended to safeguard the important line of communication between this and the *Yang kuan* station, i.e. Nan-hu. It is also only in the light of these later discoveries that I could realize fully how helpful it must have been, for those who had to guard the westernmost extension of the Limes in the desert, that the terminal point of the area capable of cultivation from the side of the Yang barrier—assuming that point to have lain near the extreme northern edge of Kuan-tsou—approached within about twenty-two miles of the Jade Gate. This fact must have greatly facilitated the dispatch of supplies and of reliefs to the outlying watch-stations of the Limes.

March to edge of tamarisk belt.

My original intention had been to move across the desert north-north-west towards the ruined fort T. XIV, which, as I already surmised, might prove to occupy the site of the Jade Gate. But Chiang-huan, our *soi-disant* guide, on the look-out for an alleged well which he called 'Lao-tsao-ching-tzŭ', took us steadily to the north-west until, after a march of about thirteen miles from the tower T. XVIII. a, we struck the southern edge of a broad belt of tamarisk-cones and scrub. Beyond the tower the bare clay on the surface of the ground had given way, first to patches of gravel and then to continuous stretches of 'Sai'. I was surprised at the time to notice numerous old cart-tracks, rather faint, leading to the north and north-west, and wondered whether they went back to the days when Kuan-tsou was still occupied and its inhabitants were likely to have resorted to the riverine jungle belt for timber and fuel. It was only in the course of my subsequent explorations along the Limes that I became aware how well the absolutely bare gravel soil of this desert can retain such traces of human passage for centuries—and even of tracks followed when there were still patrols and others moving along the Limes wall.

Old cart-tracks.

[4] Cf. above, pp. 202 sqq.

[5] *Tun* 墩 seems to be the term generally employed by the people of Tun-huang and the regions further east for all watch-towers, ancient and modern.

[6] The position of this tower, T. XVIII. a, appears shifted by a slight error to north-north-east in Map No. 78. A. 4 and hence also in Pl. 33.

[7] See below, chap. XIX. sec. iii.

Camp by decayed huts.

After marching through a maze of tamarisk-cones for another three miles or so I was obliged by darkness to halt in the first thicket of Toghraks (Camp 170 in Map No. 74. D. 4). I found there decayed huts of the roughest description, half dug into the ground. No doubt, they had once been tenanted by herdsmen, and water was then likely to have been near. But it was impossible to find any indication how long ago that was. It was an apt illustration of the doubts ever besetting the student when he has to examine things primitive and devoid of chronology. Small channels, which looked as if cut by flood-water at no very distant period, traversed the jungle at numerous points. As we passed on the morning of April 14 through this belt of tamarisks and reed-beds northward, I noticed again traces of old wheel-marks in places where there were bare clay surfaces showing cracks, as if baked by the sun after some great flooding. More of such cart-tracks were met with running east to west as we crossed a narrow belt of bare gravel.

Old wheel-marks.

Deceptive ground near Limes.

Then a wide salt-encrusted depression was struck stretching away from south-east to north-west and holding in the middle a marsh-bed, partly with open water, which was, no doubt, fed by subsoil drainage from the alluvial fan of Nan-hu. It serves to illustrate the deceptive nature of the ground along this portion of the Limes that such a considerable marsh-bed had remained unobserved by the Surveyor and myself when we had previously passed close by on our way to Tun-huang. When at last we had found a place where the boggy soil was just practicable for laden animals, and had pushed up the gravel slope beyond, I found myself opposite to what was quickly recognized as the ruined watch-tower, T. XII (Fig. 181), of the ancient Limes. After another five miles' march westwards I could place my camp once more by the small reed-fringed lake (C. 155) where I had halted after my first day's successful exploration along the Wall, and where there was drinkable water in plenty to refresh the men and good grazing, too, for the animals.

Section VI.—LIST OF ANTIQUES FROM RUINED SITES OF NAN-HU

OBJECTS FROM INTERIOR OF NAN-HU TOWN.

Nan. Ft. 001. Pottery fr. from rounded vessel of red clay, burning to smoky grey; hand-made, and fired on an open hearth, with 'mat-markings' on exterior; hole drilled, for rivet (?), in corner. $5\frac{3}{16}'' \times 2\frac{7}{8}'' \times \frac{1}{4}''$.

Nan. Ft. 002. Pottery fr. of grey clay, wheel-made, kiln-fired; deep wheel-ridge on outside; small hole drilled through lower part, for rivet (?). $3\frac{1}{2}'' \times 3\frac{3}{16}'' \times \frac{3}{16}''$ to $\frac{1}{4}''$.

Nan. Ft. 003. Pottery fr. of light red clay burning to buff; hand-made, fired on an open hearth. $2\frac{3}{4}'' \times 1\frac{7}{16}'' \times \frac{1}{2}''$.

Nan. Ft. 004. Pottery fr. from side and rim of shallow bowl, wheel-made of very hard-fired grey clay, kiln-burned; edge of rim slightly thickened and rounded; about $1\frac{1}{2}''$ from edge is raised triangular moulding running round side. Prob. Chinese, Han dynasty. $2\frac{3}{16}'' \times 1\frac{3}{8}'' \times \frac{1}{4}''$ to $\frac{3}{8}''$.

Nan. Ft. 005. Porcelain fr. from bowl painted in blue under greenish grey glaze; design undeveloped. Chinese. $1\frac{3}{8}'' \times 1\frac{1}{8}'' \times \frac{1}{8}''$.

Nan. Ft. 006. Pottery fr. of vessel of buff stoneware with good creamy yellow glaze inside, faintly crackled. Chinese; coarse example of the T'ing type of ware. $1\frac{1}{8}'' \times \frac{15}{16} \times \frac{3}{16}''$.

Nan. Ft. 007. Corner of brick of grey clay, burnt; one side broken, so thickness uncertain. Actual meas. $2\frac{1}{2}'' \times 1\frac{3}{4}'' \times 1\frac{1}{8}''$.

OBJECTS FROM 'TATI' NEAR NAN-HU TOWN.

Nan. T. 001. Pottery fr. from rim of large wide-mouthed jar, wheel-made of well-levigated clay, smoky grey burning to light brown; somewhat unevenly fired; rim slightly curved, and turns over into club moulding. $3\frac{3}{4}'' \times 2\frac{1}{8}'' \times \frac{3}{8}''$.

Nan. T. 002. Pottery fr. from vase, hand-made, of smoky grey clay, evenly fired; 'mat-marking' on exterior. $2\frac{3}{8}'' \times 1\frac{7}{8}'' \times \frac{3}{16}''$.

Nan. T. 003. Pottery fr. of dark grey (almost black) ware; wheel-made, but outer face cut or modelled into rude facets. $2\frac{3}{16}'' \times 2\frac{1}{8}'' \times \frac{5}{16}''$.

Nan. T. 004. Pottery fr. from vessel of ill-levigated grey clay burning to red; wheel-made, greenish-brown smear on outer face; orn. with narrow sunk groove, below which is trace of incised wave pattern. $1\frac{1}{4}'' \times 1\frac{1}{8}'' \times \frac{7}{16}''$.

Nan. T. 005. Pottery fr., hand-made, of grey clay burning to red; fired on an open hearth; on upper part traces of indented pattern, prob. roulette-made. $1\frac{13}{16}'' \times 1\frac{1}{2}'' \times \frac{1}{4}''$.

Nan. T. 006. Pottery fr., hand-made, of well-levigated red clay, 'smothered'; outer face smoky grey, with 'mat-marking'. $1\frac{3}{4}'' \times 1\frac{1}{2}'' \times$ *c.* $\frac{1}{8}''$.

Nan. T. 007. Pottery fr. from side of bowl of buff stoneware, wheel-made, with partial coating of translucent brown glaze in varying thickness. The glaze has only covered the upper part of the exterior, and there has been a bare ring inside. Chinese, possibly as early as T'ang dynasty. $3\frac{1}{4}'' \times 1\frac{1}{2}'' \times$ *c.* $\frac{1}{8}''$.

Nan. T. 008. Pottery fr. from vessel of ill-levigated pale grey-blue clay burning to light brown; wheel-made, kiln-fired; upper part shows traces of incised comb-drawn wave orn. $1\frac{3}{4}'' \times 1\frac{5}{8}'' \times \frac{5}{16}''$.

Nan. T. 009. Pottery fr. from rim of vessel of dark smoky grey ware; form of rim as Puski. 008; hand-made, evenly fired on an open hearth. $1\frac{11}{16}'' \times 1\frac{5}{8}'' \times \frac{1}{8}''$ to (rim) $\frac{5}{8}''$.

Nan. T. 0010. Pottery fr. from near rim of vessel; wheel-made, kiln-fired, 'smothered' ware; red clay; grey-black outer face. $1\frac{5}{8}'' \times 1\frac{3}{16}'' \times \frac{3}{16}''$.

Nan. T. 0011. Spinning-whorl (?), part of, of gritty greyish pottery; a pierced disc. Split in half horizontally. Diam. 1″.

Nan. T. 0014–16. Spinning-whorls, as Nan. T. 0011, but complete; grey clay. Diam. 1″ and $\frac{3}{4}''$.

Nan. T. 0017–20. Four stone discs with convex sides, grey. 0019, 0020 are rough; but 0017, 0018 are very truly cut. Counters in a game (?). Diam. $\frac{1}{2}''$, thickness $\frac{1}{4}''$.

Nan. T. 0021, 0022. Two stone discs similar to Nan. T. 0017–20, but of white stone. 0021 hammered only, 0022 hammered and ground. Diam. $\frac{1}{2}''$, thickness $\frac{1}{4}''$.

Nan. T. 0023. Five bronze frs., small nondescript. Gr. M. $1\frac{1}{2}''$.

Nan. T. 0025. Bronze arrow-head; triangular; hollowed for shaft attachment. $\frac{15}{16}'' \times \frac{7}{16}''$.

Nan. T. 0026. Pointed iron wedge with flat sides and blunt edges; much corroded. Arrow-head (?). $\frac{7}{8}'' \times$ (max.) $\frac{3}{8}'' \times$ (max.) $\frac{1}{4}''$.

Nan. T. 0027. Bronze arrow-head, fr. of, three-flanged; cf. N. xiv. 008; much corroded. $\frac{1}{2}'' \times \frac{5}{16}''$.

Nan. T. 0028. Bronze disc, pierced as spinning-whorl; cf. Nan. T. 0011; affected by iron rust. Diam. $\frac{15}{16}'' \times \frac{1}{4}''$, thickness $\frac{1}{4}''$.

Nan. T. 0029. Bronze disc with solid laterally-pierced boss, surrounded by relief ring; cf. Char. 0020. $1\frac{3}{16} \times 1''$ $\times \frac{1}{8}''$.

Nan. T. 0030. Bowl of miniature bronze spoon (?). $\frac{7}{16}'' \times \frac{3}{8}'' \times \frac{1}{16}''$.

Nan. T. 0031. Small bronze ring with three pegs projecting from under-side. Diam. $\frac{3}{8}''$.

Nan. T. 0032. Bronze bar bent to a ring and tapering towards ends; at one end small pierced knob. Diam. $1\frac{1}{8}'' \times 1''$, thickness $\frac{1}{8}''$.

Nan. T. 0033. Tapering bronze rod bent to form ring; corroded. Diam. $\frac{1}{2}''$, width $\frac{3}{16}''$, thickness $\frac{1}{8}''$.

Nan. T. 0034. Fr. of bronze ornamental plate, openwork, from harness; peg behind for attachment. $\frac{3}{4}'' \times \frac{5}{8}''$ $\times \frac{1}{8}''$ to $\frac{1}{16}''$.

Nan. T. 0035. Fr. of bronze orn., openwork, tendrils with flowers. Gr. M. $1\frac{1}{16}''$, thickness $\frac{1}{8}''$.

Nan. T. 0036. Square bronze plate, broken each end, with two tags projecting from one. Prob. from harness. $\frac{13}{16}'' \times \frac{5}{8}'' \times \frac{1}{16}''$.

Nan. T. 0037. Horse's tooth, fr. of. Length $2\frac{1}{4}''$.

OBJECTS FROM KU-TUNG-T'AN 'TATI', NAN-HU.

Nan. K. T. 001. Pottery fr., part of rim of vase of bright buff clay, covered on both sides with black glaze; on outside $1\frac{1}{4}''$ below rim this is abandoned. Chinese, prob. Sung, but might be as early as T'ang dynasty. $1\frac{3}{8}''$ $\times 1\frac{1}{4}'' \times \frac{1}{8}''$.

Nan. K. T. 002. Glass bead, large ring of translucent brown. Diam. $\frac{1}{2}''$, thickness $\frac{1}{4}''$.

Nan. K. T. 003–4. Two steatite discs, like Nan. T. 0017–20. 003 careful, 004 rude and chipped. Diam. $\frac{3}{8}''$, thickness $\frac{1}{8}''$.

Nan. K. T. 005. Disc of turquoise blue paste, part of, with laterally pierced boss. Diam. prob. *c.* 1″, thickness $\frac{5}{16}''$ to $\frac{1}{8}''$.

Nan. K. T. 006. Pottery fr., pink clay, covered with mottled green glaze. $\frac{3}{4}'' \times \frac{7}{16}''$.

Nan. K. T. 007. Rough flake of Sang-i-sabz (greenstone), pierced at one end for suspension. $\frac{15}{16}'' \times \frac{9}{16}'' \times \frac{1}{8}''$.

Nan. K. T. 008. Chip of turquoise. Gr. M. $\frac{7}{16}''$.

Nan. K. T. 009. Chip of dark green Sang-i-sabz (greenstone). Gr. M. $\frac{1}{2}''$.

Nan. K. T. 0010–0013. Beads. *0010.* Bugle bead of green glass. $\frac{5}{16}'' \times \frac{1}{8}''$. *0011.* Black and white banded bead of paste, pierced at one end. $\frac{9}{16}'' \times \frac{3}{16}''$. *0012.* Bead of ivory. $\frac{3}{16}'' \times \frac{1}{8}''$. *0013.* Irregular green glass bead. $\frac{1}{4}'' \times \frac{5}{16}'' \times \frac{3}{16}''$.

Nan. K. T. 0023. Bronze buckle, half of; strap badly corroded. $1\frac{1}{8}'' \times \frac{3}{4}''$.

OBJECTS FROM SITE OF KUAN-TSOU, N. OF NAN-HU.

Nan. K. 001. Fr. of porcelain from cup or bowl, thin, painted in blue under a greenish white glaze; a Manchu character repeated. Chinese. Gr. M. $1\frac{3}{4}''$, thickness $\frac{1}{8}''$.

Note.—It is most improbable that this piece is older than the present dynasty, or that any of the blue and white pieces 001 to 004 antedate the 14th century.

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Nan. K. 002. Fr. of porcelain from bowl; greyish white, roughly painted in dull blue under a greenish grey glaze; outside, a fish in silhouette; inside, arched pattern. Gr. M. $1\frac{1}{2}''$, thickness $\frac{5}{16}''$ to $\frac{3}{16}''$.

Nan. K. 003. Fr. of porcelain from rim of bowl, painted in dull blue under a greyish green glaze; outside, part of a rough floral design; chequer border inside. Chinese. Orig. diam. of bowl *c.* $5''$, gr. M. $1\frac{3}{4}''$, thickness $\frac{3}{16}''$ to $\frac{1}{10}''$.

Nan. K. 004. Fr. of porcelain from bowl, painted in blue under a greyish white glaze; arched pattern and plain bands. Gr. M. $1\frac{1}{8}''$, thickness $\frac{5}{16}''$.

Nan. K. 005. Ring of pale-green glass, part of; semi-opaque, flat inside, rounded outside; very clever imitation of jade. Thickness $\frac{1}{4}''$, width $\frac{3}{8}''$, extant chord $2\frac{5}{8}''$.

Nan. K. 006. Flake of mauve flint, carefully trimmed along two edges. Gr. M. $1\frac{7}{16}''$.

Nan. K. 007. Bronze fr., part of curved tube, thin, rolled from plate bronze and annealed up join. Diam. $\frac{3}{8}''$ to $\frac{3}{16}''$, length $1''$.

Nan. K. 008. Cast bronze fr., part of tube; broken one end; $\frac{1}{2}''$ from this end it widens. Length $1\frac{3}{4}''$, diam. $\frac{5}{16}''$ to $\frac{3}{8}''$.

Nan. K. 009. Cast bronze fr., half-bell of 'grelot' type, with projecting tongue pierced for suspension; clapper missing; round middle went three incised lines. On extant side above band, two Chin. chars.; below, conventional design perhaps intended for dragon's head. Diam. $1\frac{3}{16}$, tongue $\frac{1}{2}'' \times \frac{5}{8}''$. Pl. VII.

CHAPTER XVII

THE END OF THE CHINESE LIMES

Section I.—THE TERMINAL STATION ON THE WALL

Return to western section of Limes.

It was with great satisfaction that, on April 13, I found myself back again on the western portion of the ancient frontier line of which my rapid passage from the side of Lop-nōr, a little over a month before, had revealed glimpses here and there. Now at last I was free to start on its systematic exploration. Only a few of the watch-towers and other ruins which mark its line had then been visited. Most of the towers could only be sighted miles away, and the existence of a wall connecting them had of necessity remained a matter of conjecture. My subsequent discoveries had removed all possible doubts about the character and high antiquity of this Limes. There seemed now reasonable hope that, among the remains of a fortified border line which I knew to extend here over at least sixty miles, there were more relics waiting to be brought to light.

Explorations recorded in topographical order.

It was impossible for me to foresee then how abundant the archaeological harvest would be. But the great extent of the line to be explored, and regard for the increasing physical difficulties which the advance of the season was bound to cause in this desert region, made me fully realize from the start the importance of making the most of my time and the available resources in labour, transport, and supplies. Consideration for the tasks which I was anxious to carry out elsewhere supplied an additional reason for husbanding my time with particular care. For this purpose it became necessary to begin by making topographical reconnaissances of the different sections of the Limes, either through Surveyor Rai Rām Singh or in person, before actually starting excavations at the ruins along them, and in general to adapt the sequence of my labours to considerations of practical convenience dictated by distances, water-supply, etc. The result was that the chronological course of my explorations along the western end of the Limes had to depart considerably from the topographical order of its remains. It is obvious that, for the purposes of a systematic survey of the Limes and of the natural features of the ground upon which its line depended, the record of my observations and diggings ought to be presented in accordance with the topographical plan. I can follow this all the more easily because in Chapters LVIII–LXII of *Desert Cathay* I have already furnished a sufficient account of the course of my operations on this ground.[1]

Westernmost point of Limes proper.

Adopting the method just stated, I shall best start our survey of the Limes from the point where the westernmost part of the line of its wall can be proved to have terminated. The fact that this point lay exactly where the fortified border line abuts on the marshes of the terminal Su-lo Ho basin, and thus finds in them a most effective natural flanking defence, makes this a particularly convenient starting-place ; for we thus learn *a limine* to appreciate the decisive part which adaptation to all important natural features of the ground, and regard for their strategic advantages, have played in the planning and construction of this ancient defensive line. If we look at Map No. 74, or the somewhat more detailed one in Plate 33, we see that the line of the Limes wall runs almost due

[1] The facts above mentioned will help to explain why the numbers, T. I, II, etc., serving as 'site-marks' for the different ruins could not be given in strict accordance with their topographical order. These numbers had to be recorded on the plane-table, for the most part, in the course of the first survey made on the way to Tun-huang, when numerous ruins necessarily remained unobserved. These, on being subsequently traced, were distinguished as T. IV. a, T. IV. b, etc.

west from T. VII on the top of a narrow gravel-covered plateau, and that, when it has attained at T. IV. a the westernmost continuation of this in the shape of an outlying clay ridge, it turns sharply to the south and, after a very short stretch, terminates on the edge of marshy ground.

Natural defences on S.W. flank of Limes.

The explanation why this particular point was chosen for the end of the wall is supplied by a broad geographical fact clearly recognizable in the map (No. 74. B. 3). The Limes has reached here the extreme north-east corner of the great terminal basin of the Su-lo Ho, filled with lakes and, during most part of the year, quite impassable marshes, which extends westwards to about 92° 55′ long. (Map No. 70. D. 4), and which may correctly be described as comprising between 300 and 400 square miles.[2] Thus the Limes could here rest its flank securely for a distance of about thirty miles, in a straight line south-westwards, upon ground which was impracticable for mounted men. Further south this great natural defence was continued by an utterly barren belt of gravel 'Sai', and beyond by the area of huge dunes fringing the glacis of the Āltin-tāgh north of Anambar.

Ground favours watching of S.W. flank.

We shall see how well even here this flank was watched, against any possible turning attack, by a line of detached posts and signal-stations thrown out as far as the southern edge of the terminal basin. The defence, moreover, was greatly aided by the fact that this basin, as the map shows, extends a succession of long but narrow inlets south-eastwards into the gravel plateau beyond. The flood-beds to which these inlets clearly owed their original formation must have been as dry throughout historical times as they now are, except on the rare occasions when rain falls on the barren mountain slopes. But they bring down some subsoil moisture, which rises to the surface in rare springs by the edge of the basin and, together with the abundant desert vegetation it maintains in those inlets, renders human existence possible. The long narrow ridges of clay which the plateau projects like fingers towards the terminal basin, and which separate those inlets, rise to considerable height, some of them standing 200 feet or so above the level of the basin. Thus the posts established on them commanded an exceptionally wide outlook, assuring the further advantage that a small number of them would suffice effectively to watch the flank of the far-flung line of China's westernmost border.

Extreme western stretch of wall line.

Turning now to the wall of the Limes proper we see clearly from the map that its extreme western stretch, from T. VII past T. III to T. IV. a, follows the line of the ridge which separates the northernmost of the above-mentioned inlets from the one next on the south. In the latter, water could certainly be obtained even now by sinking wells, and reed grazing and fuel are plentiful in it. Starting from the very end of the wall at T. IV. a north-westwards, the narrow bed of the actual terminal course of the Su-lo Ho is reached at Toghrak-bulak, our Camp 154, after less than three miles, by going first across the extreme north-eastern corner of the great basin and then crossing the narrow tongue-like plateau which here divides it from the Su-lo Ho bed. This plateau is less than half a mile across here and, being only about 50–60 feet high, could be made practicable for carts coming from T. IV. a without difficulty.[3]

[2] My journey to Tun-huang in 1914 afforded opportunities for further surveys in the western part of this basin. They have shown that the terminal lake actually filled by the Su-lo Ho at that time (third week of March) stretches for about six miles rom north to south approximately in the longitude of 92° 57′ to 93° 2′.

The area annually inundated in the spring and summer is vastly greater and probably extends south as far as lat. 40° 9′ or thereabout. Eastwards it is likely to cover most of the depression left blank in Map No. 74. A. 3, 4. The conjectural watercourses from the south shown there should be deleted. The channels formed by the water that rises in the springs along the eastern and south-eastern edges of the terminal basin lose themselves in the marshy area inundated by the Su-lo Ho.

These additions and modifications of our surveys will be duly shown in Sheet No. 35 of the new atlas (1 : 500,000) now in preparation.

[3] The fact that the Su-lo Ho approaches here so closely to the north-east edge of its terminal basin, whereas at present it empties itself into that basin only after a further course of over twenty-five miles to the west, is of geographical interest.

Advanced watch-posts on Lou-lan route.

At Toghrak-bulak is struck the present caravan route to Lop. That the ancient Lou-lan route must thence have followed practically the same line north-westward is made quite certain by the series of ancient watch-towers, T. I, T. II, forming an advanced line of outposts for the Limes which is to be described further on. It is at Toghrak-bulak that the Tun-huang–Lop route, which the Limes was primarily intended to protect, finally leaves behind the surface drainage of the Su-lo Ho Basin, and at first sight it may seem as if this point might have offered an equally, or perhaps even more, favourable position for the termination of the Limes. But against this view it will suffice to point out that the very narrow and deep Nullah through which the Su-lo Ho has cut its way here westwards affords but very scanty space for vegetation by the side of the river-bed, and that the gravel-covered plateaus on either side are absolutely barren. Such a position would have been most disadvantageous for what was at the same time the terminal station of the Limes proper and a bridge-head, as it were, for the route crossing the desert to Lou-lan.

Commanding position of watch-station T. IV. b.

I will now describe what I learnt from the exploration of the three watch-stations T. IV. a–c, situated close together at the westernmost end of the fortified border line, and the survey of the ground guarded by them. As I looked out from the isolated broad clay terrace near the edge of the great marsh-covered depression, where on April 30 I had placed my camp, C. 171. a, for the sake of being near to water and yet not without protection from the pest of mosquitoes, etc., that never leave it at that season,[4] the most conspicuous of those towers was T. IV. b. It rises on the brink of steep clay cliffs, some 120 feet in height, where the narrow, tongue-like plateau already mentioned that runs from T. III falls off into the depression westwards. The view I obtained from this commanding position, both across the great basin and over the scrub-covered inlet and the gravel 'Sai' northward, was extensive. No better look-out place could have been selected for this outlying, and hence exposed, portion of the border line. But the wall had been carried, all the same, about a mile and a half further west to an isolated clay terrace rising from the scrub-covered north-eastern bay of the basin to a height slightly lower than the end of the narrow plateau; from this the terrace had, no doubt, been detached through erosion.

Westernmost watch-tower, T. IV. a.

The top of this outlying terrace, about 100 yards long from east to west,[5] was occupied at its western end by a much-decayed tower, T. IV. a, about sixteen feet square at its base and built with layers of stamped clay. Its remains were so poorly preserved that they were somewhat difficult to distinguish from the natural clay of a small knob about seven feet high which served as a base. Close to it were found half a dozen Chinese 'slips' of wood, mostly fragments (Chavannes, *Documents*, Nos. 438, 442–4), besides a bossed button in bronze and some miscellaneous iron fragments, T. IV. a. 001, 002. But far more interesting than these scanty finds at the watch-tower which marked the westernmost point attained by the Limes wall were the clear observations of the change made there in its direction. Considering the interest attaching to the position, I was glad to be able to verify them by another visit in 1914.

Limes wall turns S. of T. IV. a.

From the top of the terrace, which completely overlooked the low-lying ground on all sides, I could quite clearly see the line of the Limes running almost due south in the direction of the

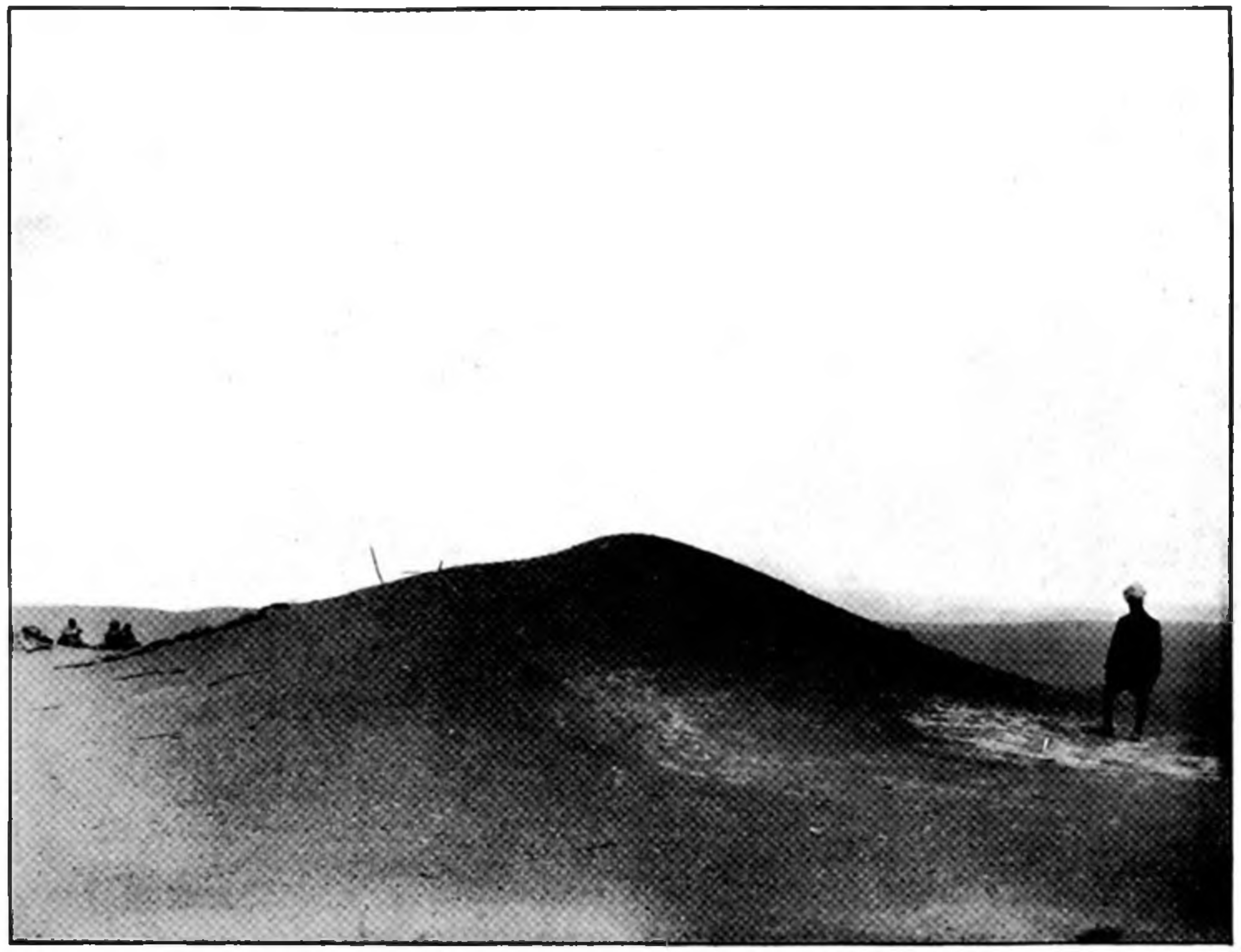
A curious parallel is presented by the terminal course of the Helmand, though on a much bigger scale. Below Rūdbār the Helmand approaches to within about eight miles of the north shore of the Gaud-i-Zirrah, which occupies the final depression reached by its waters at periodic intervals. Yet at present the Helmand River travels close on 100 miles further north before it empties itself into the marshes of the Hāmūn in Seistān, and another 130 miles or so have to be covered by its waters when, in years of great flood, they penetrate south again to the west shore of the Gaud-i-Zirrah. A comparative study of the terminal courses of the Helmand, Tārīm, Su-lo Ho, and Etsin-gol, with all of which I have had occasion to familiarize myself more or less, would bring out various interesting points of contact; but this is not the place to examine them.

[4] See *Desert Cathay*, ii. pp. 134, 157 sq.

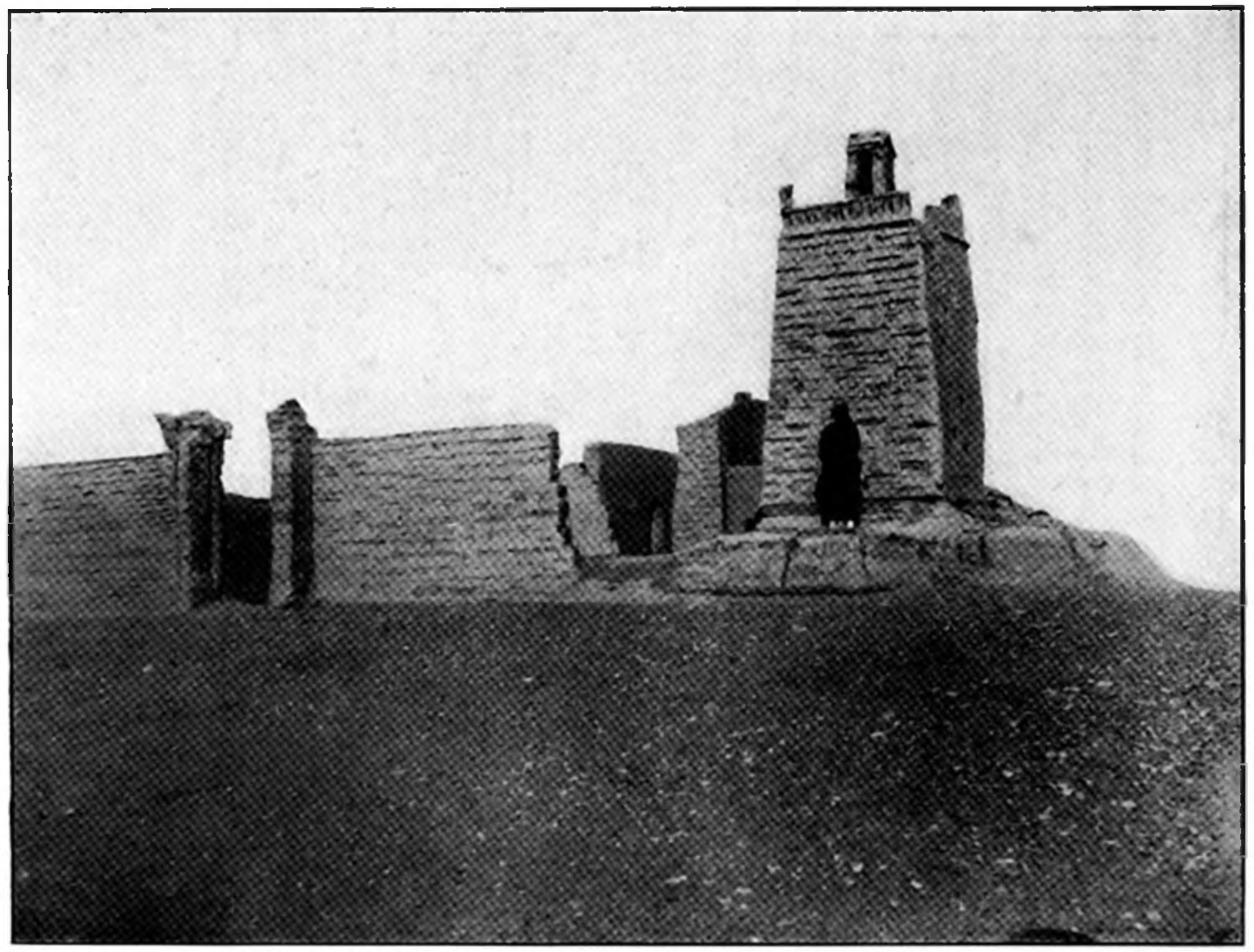
[5] Fig. 170 shows the terrace in the distant background, as seen from near T. IV. c.

P. 634

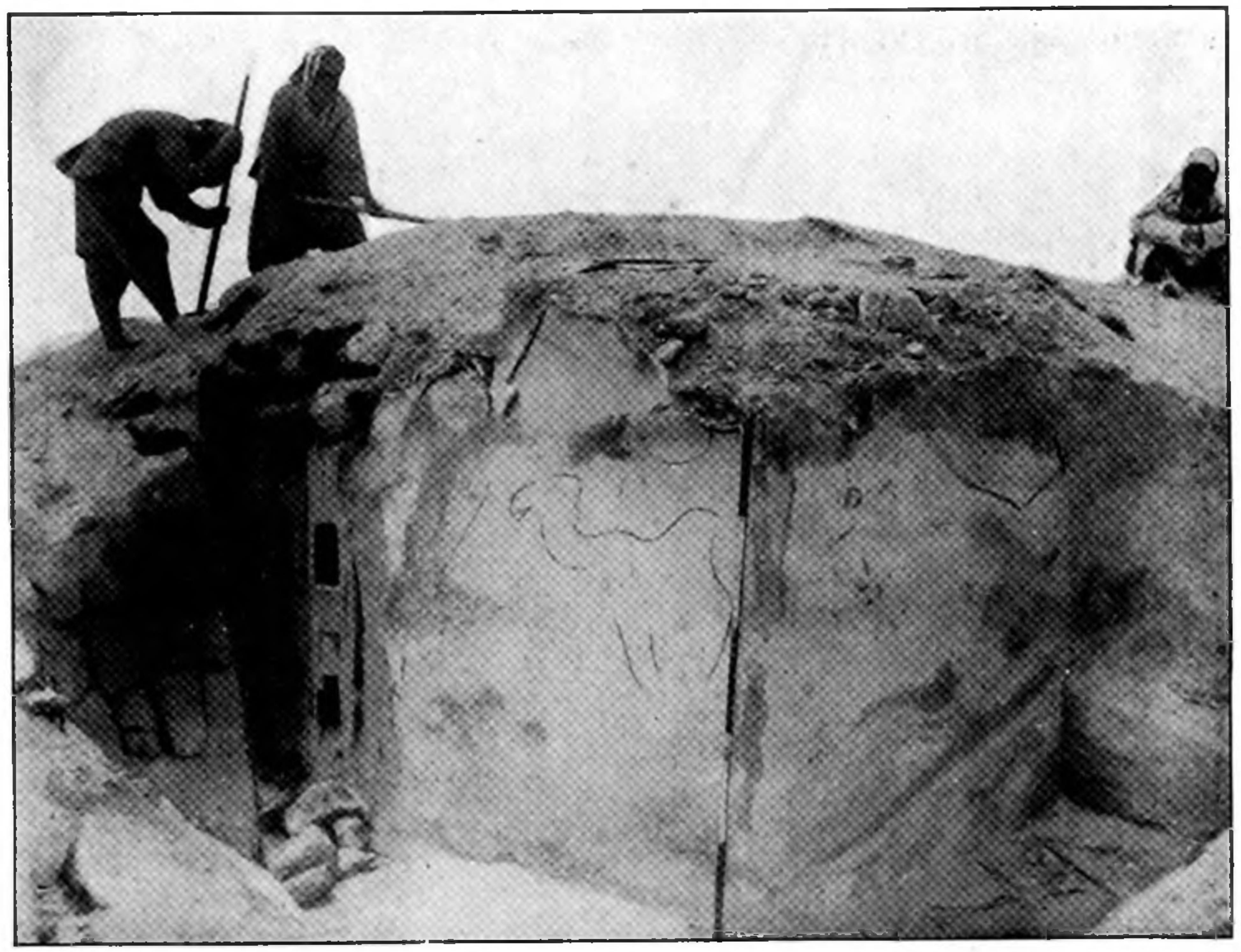
165. GRAVE TUMULUS WITH ANNULAR RIM, AT ANCIENT BURIAL-GROUND, N.E. OF NAN-HU.



166. MOUND CONTAINING REMAINS OF ANCIENT WATCH-TOWER T. VIII, TUN-HUANG LIMES, SEEN FROM S.W. BEFORE EXCAVATION.

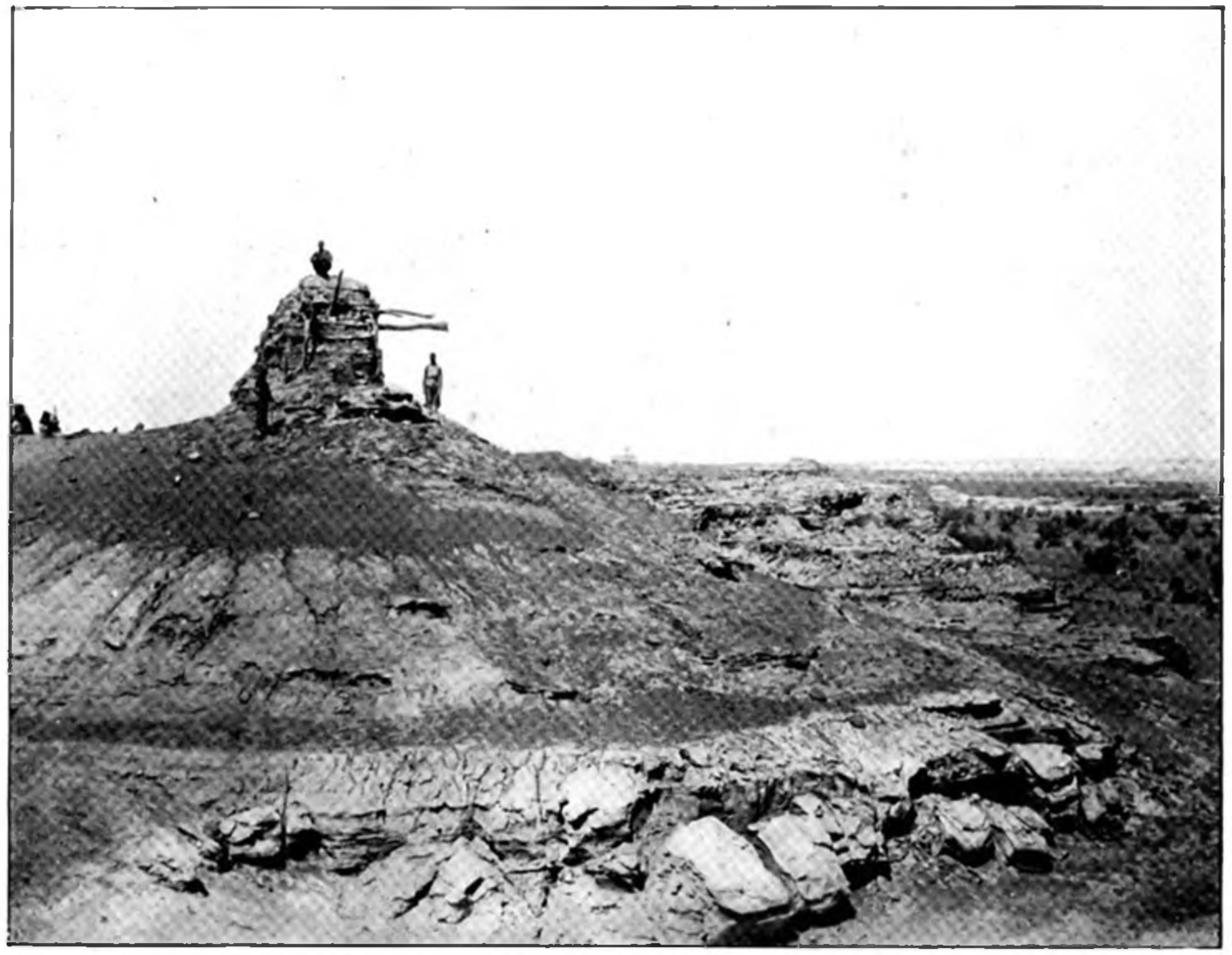


167. MODERN WATCH-TOWER, WITH ADJOINING QUARTERS, ON ROAD SOUTH-WEST OF TUN-HUANG.



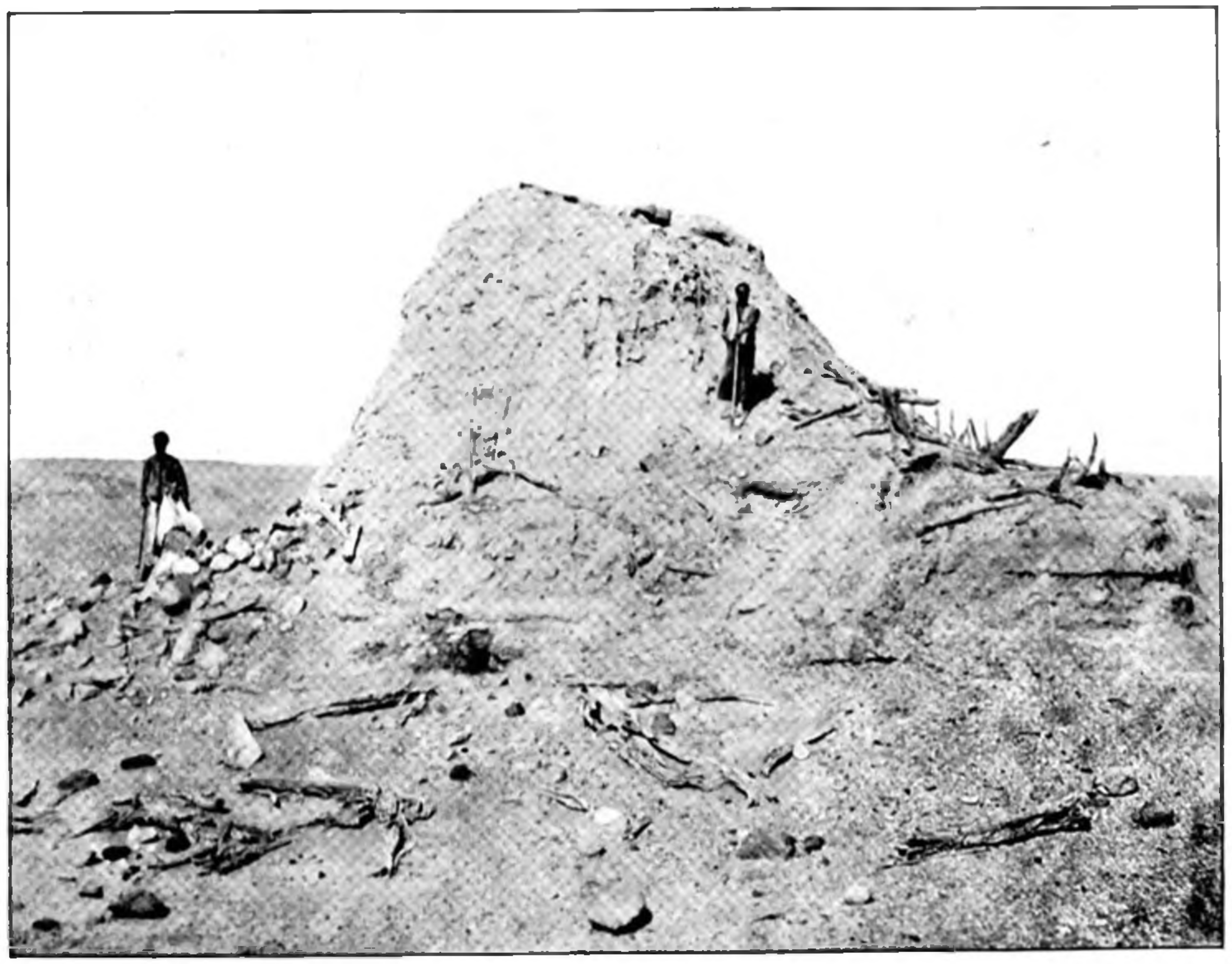
168. INTERIOR OF ROOM i ADJOINING WATCH-TOWER T. VIII, TUN-HUANG LIMES, AFTER EXCAVATION.

Door opening from ii on left, remains of steps of stairs on right



169. RUIN OF ANCIENT WATCH-TOWER T. VI. a, TUN-HUANG LIMES, SEEN FROM EAST.
On right sandy depression with Toghraks and reed beds.

170. RUIN OF ANCIENT WATCH TOWER T. IV. c, TUN-HUANG LIMES, WITH VIEW TOWARDS NORTH-WEST.
On left an eroded clay terrace with deep-cut Nullah. Across depression with Toghraks and tamarisks is seen in distance an isolated clay terrace (A), bearing remains of ruined watch-tower T. IV. a.



171. REMAINS OF ANCIENT WATCH-TOWER T. VI. b AND QUARTERS, TUN-HUANG LIMES, BEFORE EXCAVATION, SEEN FROM SOUTH-EAST.

172. RUBBISH-STREWN SLOPE BELOW ANCIENT WATCH-TOWER T. VI. b, IN COURSE OF EXCAVATION.
The splintered piece of timber held by labourer marks the spot where the main heap of Chinese records on wood was discovered close to the surface.

terrace occupied by our Camp 171. a, less than two miles away. At the foot of the steep south slope below the tower T. iv. a, but still on high ground, the beginning of this section of the wall towards the south was found still in very good preservation. For a distance of sixteen yards or so it rose to a height of five or six feet. It was constructed, as elsewhere along the western portion of the Limes, of alternate layers of stamped clay and fascines, each being about six inches in thickness. The fascines, made of reeds, were placed within these layers at right angles to the direction of the wall. Outside, the faces of the wall were revetted with similar fascines fixed lengthwise by means of strings of twisted reeds. The width of the wall at its foot was eight feet, as observed elsewhere.

Possible extension of wall to C. 171. a.

From the point where the wall entered the level ground of the basin it had decayed, under the effect of moisture and vegetation, into a mere low mound. But seen from the height of the watch-station, its line, perfectly straight, showed up distinctly enough for close upon a mile. Among the thick growth of scrub and reeds the straight mound was more difficult to follow and, as the soil grew more and more marshy, the last faint indication of the *agger* disappeared entirely. As already explained, the very nature of the ground to the west, all spring-fed marsh with salt bogs and lagoons, had rendered the defence of this flank by a wall needless further on. But I consider it all the same possible that the wall was either actually carried, or originally planned to extend, to the clay terrace on which my Camp 171. a stood. As a reference to Plate 33 shows, this terrace exactly faces the watch-station T. iv. c from the west, and in conjunction with it would complete a quadrilateral protected by watch-posts. This, adjoining the curtain of the wall from T. iv. a to T. iv. b, would have served a very useful purpose as a safe place for camps, etc., on the westernmost flank of the Limes. As, however, I did not notice any old remains at Camp 171. a, the ancient occupation of this terrace must remain a matter of conjecture.

T. iv. c guards area within Limes corner.

That there was an intention of specially safeguarding this area seems to me clearly proved by the ruined watch-tower T. iv. c just mentioned. It is perched, as seen in Fig. 170, at the western end, and on the top, of a very steeply eroded clay ridge which rises about 120 feet above the depression below it, covered with scrub and Toghrak jungle. The tower was roughly but solidly built with courses of hard lumps of clay, evidently quarried on the spot, and intervening layers of reeds and Toghrak branches. In the existing height of this masonry, thirteen feet, I counted ten such alternating courses and layers. The tower may have originally measured about eighteen to twenty feet square at its base. Nothing was found on searching the ground close to it. But at the northern edge of the ridge, about forty yards off, scanty traces of a hut survived, built with clay walls which had been faced or strengthened by vertical bundles of reeds. Here we recovered a much-clipped copper coin of the *Wu-chu* type and small fragments of a woollen material and tanned leather. It appears to me improbable that this tower T. iv. c could have been built for any other purpose than that of rendering the area due south of the curtain T. iv. a–b safer. Its distance from the watch-station T. v, conspicuously situated to the south-west, is only about two furlongs less than the distance from the same station to T. iv. b, and fire signals, etc., sent from T. v could be sighted quite as well at T. iv. b (or even at T. iii) as at T. iv. c. Hence the construction of this latter station behind the line of the wall must have been called for by some other object, and the one just suggested seems to me the most obvious.

Watch-tower T. iv. b.

The tower T. iv. b, the position of which on the line of the wall I have already described, proved to be relatively well preserved, rising to about twenty-three feet in height. It was built of carefully laid bricks, measuring on the average fourteen by seven and a half inches, with a thickness of five and a half inches, and had the usual thin layers of reeds after every three courses. The plan made by Naik Rām Singh (Plate 36) showed the base of this tower measuring eighteen by twenty-one feet. But the closer examination I was able to make in 1914 proved that it had been eighteen feet

square, a natural clay bank projecting beneath the broken west face of the masonry having been wrongly included before in the measurement. Remains of brick-built walls rising to about two feet from the ground, and enclosing small apartments which must have served as quarters for the detachment guarding the watch-station, were brought to light close to the east and north faces of tower. From the little passage iii a flight of stairs, each nine inches high and very narrow, had once led up to the top of the tower; two of them were still intact.

Documents found at quarters of T. IV. b.

The clearing of these modest quarters yielded about a dozen Chinese documents, which with one exception were on wood, several of them being in fair preservation.[6] It is curious to note that a complete and particularly clear wooden 'slip' (*Doc.*, No. 432, Plate XIII),[7] which contains a general order enjoining 'a perfect look-out and the immediate lighting of a fire-signal on receipt of one', was found just in the passage iii giving access to the top of the tower. The text itself describes it as 'an order to be posted up in a visible place of the [quarters of the] company of the watch-post', and the place where it was found proves that this direction had been duly complied with. Among the other documents, which all refer to military matters, receipts for letters, rations, and the like, two others deserve mention here as having a special archaeological bearing. The large tablet (T. IV. b. ii. 1 *Doc.*, No. 430, Plate XII) is of interest as emanating from 'an adjunct of *Ta-chien-tu*' and bearing a date which M. Chavannes hypothetically accepts as *T'ai-shih* 3, in agreement with Chiang Ssŭ-yeh's original reading. As regards *Ta-chien-tu* 大煎都, it appears to me very probable that this local designation, which is met with in nine records found at the stations T. IV. b, V, VI. b, and only in one found elsewhere, T. XIV,[8] refers to that section of the Limes which comprised the westernmost watch-towers of the wall and the detached ones guarding its south-west flank.

Ta-chien-tu, name of Limes section.

Dated records from T. IV. b.

With regard to the date it must be observed that the characters read above as *T'ai-shih*, and hence as indicating the year 94 B.C., could be read according to M. Chavannes also as *Yüan-shih*, which would make the date correspond to A.D. 3. Considering that all the numerous dated documents found at the watch-stations on the south-west flank belong to the first century B.C., and that [*Ta*]-*chien-tu* is mentioned in a document of the year 96 B.C. (*Doc.*, No. 304, T. XIV. iii. 67), I should be inclined to prefer the earlier dating. But it must be noted that another record from this station, T. IV. b. i. 10 (*Doc.*, No. 434), written on a label of red cloth, shows the name of the sub-prefecture Lo-yang written with the character 雒 which, according to M. Chavannes, necessitates its attribution to the period of the Later Han Dynasty. Accepting this evidence, we must assume that even the westernmost posts along the wall continued to be garrisoned at least until the beginning of this period, even though the detached posts on the flank may have been abandoned somewhat earlier. The discovery at the same station of records separated in date by upwards of a century can be paralleled elsewhere along the Limes.[9] In this case it must also be pointed out that the narrow passage ii may have been turned into a rubbish-heap and abandoned for a long time while the room i, where the cloth label was found, still continued to be tenanted. Among the refuse found at T. IV. b (see List) were a bronze arrow-head and numerous fragments of silk fabrics.

Traces suggesting entrenched camp.

The position occupied by the tower T. IV. b commanded so open a view of all the low ground in the neighbourhood that, as I stood there and looked about, I could not help asking myself why

[6] See Chavannes, *Documents*, pp. 96 sqq.

[7] The correct mark of this document is T. IV. b. iii. 1.

[8] Cf. Chavannes, *Documents*, Nos. 51, 137, 138, 150, 166–68, from T. VI. b; No. 430 from T. IV. b; No. 436 from T. V; No. 307 from T. XIV; also *ibid.*, p. 23. The local name *Chien-tu*, probably an abbreviated form, is found also in Nos. 304 and 356 from T. XIV, and in No. 452 from T. XV. a. For the last-named record, which also points to the location of [*Ta*]-*chien-tu* about T. IV, cf. below, chap. XIX, sec. vi.

[9] Cf. e. g. T. XIV. iii, where the dated records range from 96 B.C. to A.D. 14 (see Chavannes, *Doc.*, Nos. 304 and 317).

those who chose it had not rested content to let the wall make its bend here. It was then that my attention was first drawn to what looked like two straight lines of mounds and a third linking them at right angles, all rising above the scrub-covered, salty ground in the direction of the last tower, T. IV. a, westwards. Seen from above and at some distance, they looked distinctly like the remains of much-decayed earth ramparts, and their position, within the bend of the wall and about half-way between its last two watch-towers, at once suggested an entrenched camp. Naik Rām Singh, who had previously taken the labourers to the ruin T. IV. a to clear its remains while I was reconnoitring elsewhere, had noticed these lines independently, and in fact, when I subsequently visited that tower, they showed up quite as clearly.

Survey renewed in 1914.

Descending from T. IV. b in the direction of the last tower to the west-north-west I found scanty, yet unmistakable, remains of the Limes wall on the slope of hard clay, in the shape of the characteristic layers of reed fascines. But beyond I lost the wall amidst the abundant scrub and reeds covering the low ground in spite of much salt efflorescence, and as I rode across it, pursued by clouds of mosquitoes and other insects, I found it difficult to follow up the lines of mounds so clearly noticed from above. Hence the account given in *Desert Cathay* of my observations here remained necessarily imperfect. Fortunately I was able to revisit the ground on March 17, 1914, under less trying conditions, and the following supplementary details are taken from the survey then made.

Camp ramparts S. of T. IV. a–b line.

From the foot of the isolated clay terrace occupied by T. IV. a the line of the Limes wall could be traced quite clearly, running as a straight, narrow mound, about four feet high, across the flat ground covered with reeds, first for about 480 yards to S. 105° E. and then for about 390 yards further in the direction of S. 94° E. Here, as elsewhere on soil subject to moisture and *shōr*, the stamped clay and fascines of the *agger* had uniformly decayed into soft earth. At the point thus reached, which is almost exactly at half the distance between T. IV. a and T. IV. b, the line of the wall strikes a rampart-like bank of earth, rising close on fifteen feet above the level of the ground and about 250 yards long. It faces due west and, though not quite straight throughout nor of uniform height, distinctly suggests artificial origin. Close to the southern end of this mound is another, rising almost as high in places and equally distinct, which turns off at right angles to the east and could be traced for close on 400 yards. From the northern end a similar line of raised ground strikes off, also turning due east and hence parallel to the mound last mentioned; it could be traced for about 280 yards.

Decay of camp ramparts explained.

On the east face of the rectangle which these lines might have been meant to enclose the ground was uniformly flat. But the very absence of mounds here seemed to favour the conjecture that these banks of earth marked completely decomposed ramparts of clay. It is just on the east side that the force of wind erosion would have full play, and what the effect of this can be on massive ramparts of the same type, even when situated on ground still supporting a good deal of vegetation, is strikingly illustrated by the remnants of the walls of the ruined town south of Ch'iao-tzŭ, seen in Fig. 185. There, too, the eastern face of the outer walls has almost completely been destroyed, just as at the Lou-lan Site.[10] It remains to be mentioned that I found these mounds thickly covered with tamarisk growth and other scrub, and strewn in places with dead Toghrak trunks and branches, while in the *shōr*-covered interior vegetation was scant. It was impossible to expect structural remains of any sort to survive on ground like this, subject to the decomposing effects of subsoil water close to the surface and salt efflorescence. Even the small, hard débris of the 'Tati' type, which alone could withstand them, would be bound to be completely hidden in such soil. In fact, eight months later I could study exactly corresponding results which permeation with water had produced at ruined sites by the side of the salt-impregnated shores of

[10] Cf. above, pp. 387 sq. ; also below, chap. XXVI. sec. iii; and for the ruined towns near An-hsi, chap. XXVI. sec. ii.

Lake Baghrash.[11] Since then I have had repeated occasions on my third journey to make similar observations elsewhere.

Reasons for locating fortified camp.

Taking account of all these facts concerning the ground which adjoins the wall between T. IV. a and T. IV. b immediately on the south, I retain the impression that we have here traces of a fortified camp established at an early date just where the Lou-lan route passed outside the walled line of the Limes. Here at the foot of the plateau, on ground possessed of abundant desert vegetation and hence well provided with grazing and fuel, there was shelter also from the bitter winds of this region, and no difficulty about reaching water by means of wells.[12] A larger station for troops was here justified by the risks against which it was necessary to guard at an obviously exposed corner on the extreme western flank of the Limes proper. But most important of all was, perhaps, the consideration that this was the last permanently occupied place within the borders of the Empire which the Chinese troops and missions would pass as they went by the dreaded desert route to Lou-lan and the 'Western regions', while, for those fortunate enough to return, it was the very first to enter *kuan li-t'ou*, or *intra muros*. Thus a fortified camp established here would serve as a depot station, or bridge-head as it were, for the long and difficult journey through the Lop desert, just as the ruined Chinese *castrum* L.E., which I discovered in February, 1914, undoubtedly did on the Lou-lan side of the route.[13]

'Well of Protector-General' of *Wei lio*.

It is by these clear topographical indications that I am led, as already explained in a previous chapter,[14] to place at this very point 'the Well of the Protector-General' which the detailed itinerary of the 'central route', i.e. of the route to Lou-lan, preserved in the *Wei lio* mentions between the *Yü-mên kuan* and the northern extremity of the *San-lung*, or 'Three Ridges' sands. I have shown above that by the latter are meant the three dune promontories to be crossed to the south-east of Bēsh-toghrak. That Yü-mên, or the Jade Gate, at the period to which the account of the *Wei lio* goes back was situated at the ruined station T. XIV is proved beyond doubt by archaeological and documentary evidence to be discussed further on. If we now look at the detailed map of the Western Limes in Plate 33, it shows us that the area protected by the towers T. IV. a, b, c lies exactly half-way between the two points, being about twenty-five miles, as measured on the map, from either. Toghrak-bulak close by has now taken the place of the ancient station. From there caravans nowadays cover the distance to either point in two marches, and no doubt did the same in Han times. Hence I do not hesitate to place the 'Well of the Protector-General' in this area.

Advanced line of towers on Lou-lan route.

Before leaving this western termination of the wall I may conveniently describe what I learnt from a long day's reconnaissance, made beyond it on May 2, 1907, along the ancient Lou-lan route north-westwards. It furnished definite proof that, though there had been no extension of the wall in that direction, the towers I had passed on my first approach to Toghrak-bulak in March dated back to the same time as the Limes proper. Their position close to the route now leading to Lop, and once to the ancient Lou-lan, clearly shows that they were intended to serve as watch-posts from which reports about movements, etc., along the road could be sent in advance, eventually by means of fire-signals such as the records discovered at the Limes stations so often mention,[15] to the detachments guarding the line of the wall. As the tower T. II, the furthermost of these outpost towers actually traced, was over seven miles distant from T. IV. a, signals dispatched from it might be received in useful time to serve for alarms, etc.

[11] Cf. below, chap. XXIX. sec. i.

[12] The advantages offered by this area were proved by an abandoned and ruined station of Chinese graziers which I found by the side of a clay terrace about 1½ miles south-south-west of Camp 171. a (see Pl. 33), and by the fact that in March, 1914, I observed a small camp of Mongols actually grazing their horses and cattle south of T. IV. a, b.

[13] Cf. above, pp. 423, 553 note 3.

[14] See above, pp. 556 sq.

[15] See below, chap. XX, sec. vi.

Su-lo Ho bed at Toghrak-bulak.

The gravel plateau above Toghrak-bulak, where the route now crosses the deep-cut Su-lo Ho bed, would have suggested itself as a very suitable position for a first watch-post on this line thrown out to the north-west. But no tower survives there, and the rapid inspection that I was able to make of the river's left bank did not reveal any traces of ancient occupation. Perhaps closer search by some future traveller may find its reward here. The trench-like Nullah in which the present bed of the Su-lo Ho lies, sunk some fifty to sixty feet below the level of the 'Sai', is so narrow and steep that it is only visible on close approach. The river by May 2 filled its bed completely and was unfordable at the marshy spring where we had before crossed and camped on March 7. Descending a short distance, I found a place where the bed somewhat widened and was sufficiently shallow for crossing. The volume of water then carried by the river amounted to about 1,800 cubic feet per second. This observation has its interest as showing how great a proportion of the total discharge of the Su-lo Ho is lost by evaporation and by absorption in the marshes around and below the Khara-nōr before it finally empties itself into the terminal basin below Toghrak-bulak. A measurement taken on April 1, 1907, on the Su-lo Ho, at a point well above its junction with the Tang Ho, had indicated a volume over 4,000 cubic feet per second, and four days later I found that the Tang Ho at Tun-huang carried over 2,100 cubic feet in a second, without counting the water taken off in the canals of the oasis. Thus the discharge at Toghrak-bulak represented less than one-third of the total amount of water carried down into the Khara-nōr. Yet it may be safely assumed that this total volume had considerably increased in the course of a month, owing to the continued melting of snow and ice in the high ranges of the Nan-shan.

Volume of water carried by Su-lo Ho.

Tower T. I overlooks old river-bed.

The first ruined tower, T. I, reached after about two and a half miles beyond Toghrak-bulak, stands on the very brink of steep cliffs that rise fully seventy feet above an old bed of the Su-lo Ho, now dry, and overlooks, for a considerable distance, the wide depression in which it lies. It is possible, and even likely, that this river-bed, the debouchure of which into the ancient terminal basin crossed on the way from Bēsh-toghrak I have already mentioned,[16] still received occasional floods, or at least held drinkable subsoil water, at the time when the Limes was occupied. The dry salt pools noticed in 1907 close below T. I contained fairly large sheets of water when I passed here seven years later. The extensive reed-beds that fill most of the depression here also point to occasional inundations from the actual terminal course of the Su-lo Ho.

Construction of tower T. I.

Though the ground close by was much cut up by small ravines due to the action of water, the tower, occupying the top of a small and almost completely isolated ridge, difficult of access, still rose to a height of about twenty feet. It measured about sixteen feet square at its base and was built with stamped clay in layers of three to four inches thick. Wind-erosion had cut down the soil near the north-east corner by some three feet or so. A structure of some sort had once stood on the west of the tower, but only a brick-built base remained, measuring about twenty feet by fifteen. Owing to the steepness of the slope below, little débris and refuse survived. Among it, however, I found three fragments of Chinese records on 'slips'. One of these, *Doc.*, No. 673, contains a statement about the manufacture of bricks by soldiers. Large stones which I found lying at the foot of this tower are likely to have been originally placed on the top for use in defence, just as I have seen them in all the modern watch-towers and circumvallations of westernmost Kan-su.[17]

[16] Cf. above, p. 552.

[17] I may here note in passing that when I returned to this tower in 1914 I could trace my own footprints of seven years before quite clearly on the gravel surface around, a curious experience repeated again and again along the revisited portion of this westernmost Limes, and one for which similar observations of far more ancient tracks, which will be recorded later, had fully prepared me. See below, pp. 656 sq.

Tower T. II.

The tower T. II was found to occupy the western edge of the same gravel-covered plateau, that here rose about fifty feet above a broad depression with reed-covered patches. It was in fairly good preservation, built with layers of stamped clay about three inches thick and standing to a height of fully twenty-two feet. Here large stones, stored with the purpose just explained, were still seen actually on the top of the tower. Others had fallen and got jammed in a fissure running down the upper part of it. Here, too, wind-erosion had laid bare the ground along it on the north and south to a depth of two or three feet. No débris from any adjoining structure, nor refuse layers such as would point to continuous occupation, could be traced near. The absence of potsherds was also significant. But, searching the neighbouring ground, we picked up some metal fragments, T. II. 001. a–d, including two arrow-heads of the Han type in bronze and iron.

No more towers along Lop route.

From T. II I continued my reconnaissance along the Lop route for another four miles or so north-westwards without being able to find the ruined 'Pao-t'ai' which Rai Rām Singh, when previously surveying the ground between the several terminal river-beds, had marked on the map, and which on the strength of this has been shown as T. II. a in No. 74. B. 3. He had sighted it from the west, as his route shows, but had not been able to visit it. My failure on May 2, 1907, to discover it might be attributed to the dust haze which a strong north-west gale had raised in the afternoon of that day. But as the same experience was repeated when I passed here again in 1914, under atmospheric conditions somewhat better, I am now inclined to believe that the surveyor's entry may have been due to some visual deception, easily accounted for on such ground where refraction and glare are apt to give the appearance of a tower to a mere natural knoll of clay. In any case it is clear that the absence of water would have made the maintenance of an advanced line of posts here very difficult in ancient times.

Section II.—THE SOUTH-WESTERN FLANK OF THE LIMES

Watch-stations guarding flank of Limes.

Before we follow the line of the Limes eastwards, it is desirable to describe the observations and finds attending the exploration of the detached watch-stations, five in all, which guarded its south-western flank. The broad topographical facts, and the military considerations based upon them, which induced the constructors of the Limes to use the marsh-filled terminal basin of the Su-lo Ho as a natural flanking defence, have already been fully set forth in the preceding section. What I have to describe here will help to illustrate them in detail.

Moving from Camp 171. a to the south-south-west on the morning of May 3, I first reached, across boggy ground, a low broad terrace less than two miles distant, where Surveyor Rām Singh had previously reported some ruined dwelling. It proved to be of very recent origin and to mark what evidently was a regular grazing station, visited by Chinese Muhammadan herdsmen down to the times of the last Tungan rebellion, and perhaps later, too. Under the abundant refuse-layers that covered the clay terrace I failed to trace any ancient débris. Yet there is a topographical consideration which suggests the possibility that this point was already occupied in the times of the Limes. An examination of the map, Plate 33, shows that the distance between the tower T. IV. c and the next one to the south-west, T. V, over seven and a half miles, is far greater than that between any two of the other watch-stations, T. V, VI. a–d, which belong to the flanking line along the terminal marsh basin. There the distance is uniformly about five miles. From the map it is also seen that the position of the terrace and hut above mentioned falls very close to the almost straight line which connects those flanking posts with each other and with T. IV. c. Both T. IV. c and T. V are visible from the terrace, which thus could conveniently have served for an intermediate signal station. But in the absence of direct evidence this must remain mere conjecture.

Distances between watch-stations on flank.

Passing thence westwards through luxuriant Toghrak jungle, I ascended a long, tongue-like plateau which bears, near its south-western edge, the ruined watch-tower T. v (see Plate 36). Neither on its gravel-covered surface nor elsewhere along the flanking line of towers could any indication be discovered that the wall of the Limes was ever extended in this direction beyond the stretch seen just south of T. IV. a. The elevated position it occupies, together with its own height, made the tower T. v a very conspicuous object even from afar. Though a portion of its west face had fallen, it still rose to over thirty feet in height. It measured nineteen feet square at the base, and on its top preserved heavy beams of Toghrak wood, together with the remnant of a low brick parapet. The material used was stamped clay in layers about three inches thick. On the north of the tower were the remains of some small quarters, having walls of greatly varying thickness built with bricks approximately of the size usual along the ancient Limes, about sixteen by seven and a half inches and five inches thick. Watch-tower T. v.

In the little apartment marked i on the plan there were found half a dozen Chinese tablets, mostly well preserved, including one, *Doc.*, No. 428, Plate XII, dated 39 B.C., and another, *Doc.*, No. 429, Plate XIII, which contains a calendar for the same year.[1] Among the contents, which refer mainly to military matters, I may note the mention made in No. 436 of 'the captain of the company of Ta-chien-tu', which bears out the previous suggestion about the connexion of this local name with the south-western flank of the Limes.[2] The miscellaneous finds in the quarters were few, but they included four wooden brackets, painted in several colours, T. v. 001–4 (Plate LIV), which are of interest as representing a class of barrack fittings regularly used in these watch-stations. They differ considerably in size, and to some extent also in style of decoration, as is seen from the illustrations in Plate LIV and the general description given in the List below, under T. VIII. 004. In each case, however, there is a solid tenon, square in section, for insertion in the wall, and a hooked bracket resembling a claw turned upwards. The fact that the paint has ordinarily been rubbed off the upper surface of the indented portion next to the claw-like end clearly shows that these brackets were used for hanging up clothes, articles of equipment, etc., and arms, too, if they were big enough. There were plentiful refuse-heaps on the slopes below the watch-station, proving that it had been occupied for a long time; but their contents were only dung of horses and camels, reed straw, and the like. Finds of documents at T. v. Wooden brackets for hanging clothes, &c.

The position occupied by T. v was typical of the watch-stations which were found to stretch far away to the south-west along the edge of the great marshy basin. The distances at which they were placed from each other, in the case of T. v, T. VI. a, c, d, always about five miles, clearly showed that they were meant mainly as signalling posts along a line, and not for warding off inroads. The objects which the wall was intended to serve along the front of the Limes were here, on its south-western flank, secured by practically impassable marshes. Yet even thus the links of the chain of posts could not have been kept so far apart, with the consequent saving in trouble and cost, had not the configuration of the ground offered ideal positions all along for signalling stations visible far away. Position of posts chosen for signalling.

As I have already had occasion briefly to notice, and as the map in Plate 33 clearly brings out, the bare gravel-covered plateau which marks the foot of the alluvial glacis of the range south of Nan-hu here stretches out a succession of finger-like ridges of clay. They project into the wide marsh-filled terminal basin of the Su-lo Ho like headlands of a coast-line indented by deep fjords, rising with very steep faces to heights from about 120 to over 200 feet above the intervening depressions and commanding extensive views, as can be seen from the vistas presented in Figs. 169, 170. Ridges utilized for watch-stations.

[1] Through a clerical oversight, Nos. 428, 429, 436, 439 (*Documents*, pp. 95 sqq.) were given the wrong site-mark T. IV. d.

[2] See above, p. 636.

Thus the ridges furnished excellent natural bases for the watch-towers, and the Chinese constructors of the Limes, with their unfailing eye for topography, did not fail to make the most of them. On this account these towers could always be sighted easily from afar. I had already recognized T. v and T. vi. a as towers on my first visit to T. iii, though it is fully fifteen miles away from them in a straight line. It was curious to note, as my survey progressed to the south-west, that the towers T. v, vi. a, c, d were seen to fall into an almost straight line from T. iii as the starting-point, as if special care had been taken to fix their positions by sighting with a diopter.

Physical features of ground.

The special quasi-geological interest belonging to certain physical features of this strange inland coast-line have been so fully discussed elsewhere[3] that it will suffice very briefly to refer to two of them which have a direct bearing on the positions chosen for the flanking line of watch-stations. The clay ridges mentioned above which form the headlands jutting out into the marshy basin, and the long-drawn bays and inlets which intervene between them, invariably lie in a general direction from south-east to north-west. It is clearly seen from the Map (Nos. 74, 75) that this is due to the erosive action of the water once carried down from the foot of the distant mountains and across the gravel glacis, now utterly dry and barren. The deep-cut beds, which descend to the heads of the inlets and in places are traceable along the steep foot of the ridges, were also surveyed afterwards in their upper ravine-like courses cut across the glacis. There were signs that these beds are swept by exceptional floods even at the present time, though the intervals of absolute dryness may last many years. In any case, there is conclusive evidence of subsoil drainage in the springs which, as I found, rise within the bays of the basin. The water of those higher up was fairly drinkable, but further down towards the edge of the marsh area it rapidly grew salt. To this consideration we may reasonably attribute the fact that the watch-stations T. v and T. vi. a were placed, not at the far end, but about the middle of the clay ridges which they respectively occupy.

Clay terraces continuing line of ridges.

The same consideration must have also made itself felt as regards the position of the last two stations, T. vi. c and T. vi. d, which are found on isolated clay terraces not too far from the 'coast-line'. These terraces themselves afford striking evidence of the great effect which another and, throughout the historical period, certainly far more powerful agent has had upon the present configuration of the ground. It is wind-erosion which is at work here, and has been for ages. There can be no doubt that to its action are due the strings of isolated clay terraces, or Mesas, found within the wider bays and running parallel to the bordering plateau ridges, as well as those which, forming a continuation of these ridges, project into the marshy expanse of the basin and still maintain the same bearing. Both groups of Mesas are extremely numerous, though for obvious reasons only a small proportion could be marked on the map.

Ridges broken up by wind-erosion.

The narrow ridges formed out of the alluvial plateau by the action of running water were bound to be broken up into terraces by the cutting and grinding force of the wind, as they stretched more or less at right angles across its prevailing directions from the north-east and east. On the crest of the still continuous ridges the sapping and scooping action of the wind could be observed in progress, marked by wind-eroded trenches usually starting from the north-east. Such a trench, of considerable size, is seen in the foreground of Fig. 169.[4] It is the interaction of water and wind-erosion, here so clearly illustrated, which helps best to explain the maze of detached clay terraces encountered along the north-eastern shores of the ancient Lop Sea bed, in the dried-up terminal basin of the Su-lo Ho east of Bēsh-toghrak, and again around Khara-nōr.[5]

[3] Cf. *Desert Cathay*, ii. pp. 139 sqq.

[4] On the left of Fig. 170 is a similar but completed trench by which a clay terrace has been entirely separated from the end of the ridge on which the tower T. iv. c stands. Cuttings of the same type, due to wind-erosion, are illustrated by Figs. 187–90, which show ground towards Khara-nōr.

[5] Cf. above, pp. 341, 423 sq., 552, 575, 589; *Third Journal of Exploration, Geogr. Journal*, xlviii, pp. 127 sqq.

Observation of the powerful rôle which wind-erosion has thus played in this region, as a geological factor sculpturing the surface on a big scale, makes it easier for us to appreciate its effects upon the work of man. Again and again, in the course of my surveys on the Limes, I had occasion to note how relatively well preserved the wall, built fully 2,000 years ago, still rose along those sections which lay parallel to the prevailing direction of the winds. This was specially noticeable where the wall passed through depressions, as near T. III and T. XIII, which afforded some shelter from the gales sweeping across the 'Sai'. On the other hand, where the line had been drawn across on exposed ground and thus presented an obstacle, or rather an object of attack, to the driven sand and fine gravel, wind-erosion had badly breached or practically effaced the rampart, as e.g. to the north of T. VII. Yet it is well at the same time to bear in mind the relatively slow progress of wind-erosion on the soil itself, as gauged e.g. at the foot of the towers, where it rarely was more than two to three feet. The archaeological evidence here available is of special value to the geographer, as it offers a definite chronological scale for estimating the vast lengths of time necessary for the changes in the configuration of the surface which have already been discussed. **Effect of wind-erosion upon Limes wall.**

My explorations along the Limes were, both in 1907 and in 1914, carried on during the months of March, April, and May. Though this added to the physical trial, it also helped me to note that in the spring, when the force of the winds probably approaches the annual maximum, the most violent gales came mainly from the north-east and east. With this my observation fully agrees that the trees, whether in the riverine belt of the terminal Su-lo Ho or within the oases of Tun-huang and An-hsi, invariably have a westward bend. The force of the winds sweeping down the lower Su-lo Ho basin, and also towards it across the Pei-shan desert from the side of southern Mongolia, is dreaded by all travellers proceeding to and from Hāmi. The Chinese appropriately couple the name of An-hsi with them. That they also make their effect fully felt in the Lop desert and in the easternmost portion of the Tārīm Basin may be considered certain in view of the observations I have already had occasion to record. **Prevailing winds from E. and N.E.**

A very likely explanation of the main direction of these desert winds is supplied by 'aspiration', the atmospheric movement resulting from the higher average temperatures which the low-lying desert plains around Lop-nōr, and further away to the east and west of it, must attain in the spring while cold still prevails on the great barren uplands of stone and gravel north-eastwards. An exactly corresponding atmospheric phenomenon is observed in the regular winds blowing down from the mountainous north-east of Persia into the low Seistān basin, the well-known *bād-i sad-ū-bīst rōz*, or 'wind of hundred and twenty days', which prevails there during the greater part of spring and summer. The terminal basin of the Helmand presents, in most physical respects, so strikingly close a parallel to the basins of Lop and the Su-lo Ho that, even in the absence of exact data for the latter, such as only meteorological stations established hereafter in these trying regions could supply, I feel justified in putting forward that conjectural explanation. **'Aspiration' explaining prevailing winds.**

The tower T. VI. a was reached from the last one described after crossing two wide inlets of the basin and a much-broken clay ridge between them. It occupied, as seen in Fig. 169, a very conspicuous position at the north-eastern edge of a narrow ridge falling off with steep cliffs. Much of the masonry on the north face had come away, and the heavy posts and beams of Toghrak wood inside it were exposed. Thus the tower was in appearance strikingly different from those at other stations. Originally about eighteen feet square at the base, it still rose to a height of close on fifteen feet, though its top, too, was much broken. It was built of sun-dried bricks, measuring fifteen by seven and a half inches and five inches thick, with layers of reeds after every three courses. Unhewn Toghrak trunks, still over thirteen feet in height, were embedded in the masonry as vertical supports, and to them others, even longer, were fixed **Watch-tower T. VI. a.**

horizontally, completing what served as a kind of internal framework for additional strength. By the east face of the tower was a flight of stairs about one foot wide, of which the four lowest steps survived. Close to them were the foundations of single-brick walls enclosing five small recesses, only two to three feet wide and three to four feet long, obviously intended to hold stores. On the steeply-eroded slopes to the north and east other structural remains may have disappeared altogether. A large dung-heap on the west had fared better; but neither there nor at the foot of the tower were any finds made. About 200 yards off to the south low bundles of reeds and Toghrak branches were discovered on the top of the gravel plateau, embedded in coarse sand and lying in a broken line about forty feet long, as if marking some enclosure.

Section III.—THE ANCIENT STATION T. vi. b AND ITS RECORDS

Position of watch-tower T. vi. b.

Immediately to the south of the ridge bearing T. vi. a, a deep-cut dry river-bed, about twenty yards broad, was crossed, and beyond it an area was entered where low scrub-covered ground was broken up by small plateaus and isolated clay terraces. Further on a narrow gravel-covered ridge rose to about 100 feet above the depression and, as usual, at its western end tapered away into a short line of detached terraces. Both the centre of the ridge and the last outlying clay terrace, or Mesa, were occupied by towers, a fact which, being unusual on this flank of the Limes, was bound to attract my attention at once. As the distance between them was less than three miles, and as the tower on the ridge, T. vi. b (Fig. 171), lay well behind the line, this could not have been intended for a mere signalling post. The débris adjoining the tower on the east seemed to indicate quarters somewhat larger than usual. So the thought soon suggested itself that the position marked by the ruin might have been that of some main station that controlled this flanking section of the Limes.

Advantages for *point d'appui.*

The numerous layers of refuse which were scattered over the gravel slopes near the ruined station seemed to agree with such an assumption and, in any case, furnished proof of prolonged occupation. There could be no doubt either that the position was one which offered special advantages for a sort of *point d'appui* or main guard-post. Though only about a hundred feet or so above the low ground at the foot of the ridge, it commanded a complete and open view of the southern and south-eastern shore of the marshy basin. This extended to the foot of a distant chain of low hills, entirely covered with big dunes, which was seen to come from the direction of Nan-hu and stretch far away westwards. The belt of high sands along it seemed to bend round the south-western end of the wide marsh-filled basin and to continue towards the great sand ridges flanking the Bĕsh-toghrak valley (Maps Nos. 71, 75, 79). It was clear that any inroads attempted here from the north or west of the terminal depression of the Su-lo Ho would have to keep between the shore of the marshes and the impassable high sands. The ground left there is a narrow belt of gently sloping and absolutely bare gravel 'Sai'. Consequently, the line of watch-posts that extended across the south-eastern corner of the basin (Map No. 74. A. 4) to within sight of those high sands would, when controlled and supported from a main post at T. vi. b, effectively protect the Limes proper and the important route it was meant to safeguard from being outflanked by raiders.

Quarters of watch-tower T. vi. b.

The tower T. vi. b in its ruined state rose to a height of about sixteen feet and, as the plan (Plate 37) shows, had a base of some twenty-one feet square. It was built of sun-dried bricks, measuring about $14\frac{1}{2}'' \times 7'' \times 5''$ with the usual layers of reeds at intervals. Excavation of the

mound adjoining it on the south brought to light fairly well preserved quarters, enclosed within a massive wall about three feet thick, and showing some interesting details of arrangement. The approach lay through a narrow passage, the entrance to which on the north, only two feet wide, still retained massive wooden door-posts. Mortices, about five inches square, cut into the side walls showed where the wooden bars that bolted the door must have rested. From a small anteroom, about nine by eleven feet, a flight of stairs, about two feet wide, once led up to the top of the tower; six steps, each nine inches high, were still intact. Walls about one foot six inches thick and built of single bricks, 16″ × 5″ × 5″, with plastered faces, divided the interior of the quarters. A small apartment, ii in Plate 37, measuring nine by seven and a half feet, held a low sleeping platform built of plaster, and is likely to have been also used as an office; for here were found eight Chinese records on wood, some in good preservation. One of them, *Doc.*, No. 255, I may mention at once, records the arrival of an officer, giving the exact date, May 10, 68 B. C.

Living quarters of soldiers.

The larger room to the east, iii, measuring seventeen by twelve feet, served probably as living quarters for the men on duty at the post. In the north-east corner I found a fire-place or oven, separated from the rest of the room by a thin round clay wall burnt red. Ashes with débris filled it to a depth of about four feet. How this oven or stove was actually worked could not be exactly determined. In any case, it is curious to note that this was the only place among the stations on the Limes where some permanent arrangement for heating could be traced. Open fires or portable braziers may have been used elsewhere. Another fitting still *in situ* was a wooden shelf or rack about one foot wide, made of Toghrak sticks and bearing a reed matting with plastered surface. Leaving the records from these quarters [1] to be considered together with the far more abundant harvest of documents which, as we shall presently see, rewarded the clearing of the layers of refuse elsewhere, I may briefly mention a few of the miscellaneous relics that were found here.

Miscellaneous relics from quarters.

Among them is the point-end of a two-edged iron sword-blade, T. vi. b. 001 (Plate LIV); a small well-lacquered wooden bowl, showing remains of scroll ornament, T. vi. b. ii. 001 (Plate LII); a wooden bracket for hanging up equipment, T. vi. b. iii. 001 (Plate LIV), etc. Two wooden objects are curious, and their purpose has still to be determined. T. vi. b. 003 (Plate LII) is a wedge-shaped block painted black, about eleven inches long, of a type also represented by two other specimens, T. vi. c. iii. 001 and T. viii. 1, which bear traces of two or three Chinese characters. A loop of string fixed into the broad end showed that the piece of wood was intended to be carried about or hung up. A conjectural explanation of its use proposed by my Chinese secretary is recorded in the note below.[2] More puzzling still are the two wooden bars, two feet long and evidently forming a pair, T. vi. b. 004. a–b (Plate LII). The long slits cut down the middle of the narrow sides show remains of a leather lining, which suggests that a string or some other thin object was meant to move in these slits. Is it possible that these bars formed part of a catapult or some similar contrivance? A short Chinese inscription painted on one of them is no longer legible.

At the very time of my arrival at this station the extent of the refuse-heaps near it had

[1] I may note here a few corrections in the site-marks shown for these records in *Documents*, pp. 62 sqq.: No. 261 should read T. vi. b. iv. 3; No. 264, T. vi. b. ii. 1.

[2] Chiang Ssŭ-yeh thought that the two large characters painted in red on the big wedge T. viii. 1 (Pl. LII) might be read as a personal name and would give no sense otherwise. This and the loop of string always found with these wedges recalled to him that, at Lan-chou and other garrisons, he had seen soldiers, when off duty and permitted to absent themselves from their posts, carrying about conspicuous pieces of wood inscribed with their commandant's name as tokens of their 'permit'. Such a token would save the bearer from being questioned whether his absence was authorized; if provided only in a single specimen, it would also prevent too numerous applications for leave. I give my learned secretary's ingenious guess for whatever it may be worth.

Wooden records from refuse-heap.

impressed me. Ends of brushwood, reeds, layers of dung, and the like, cropping out on the gravel-strewn slopes of the little eminence occupied by the ruined watch-tower, were sufficient evidence of them. An experimental scraping, made on the evening of our arrival at a point where a few wooden posts protruded some dozens of yards to the north-east of the tower (Fig. 172), soon brought to light, from the lower edge of a large deposit of refuse, over two score of Chinese records on wood of the usual 'slip' size (T. VI. b. i. 1–46). Most of them were complete, but had suffered much decay by moisture owing to exposure near the surface and to the close vicinity of a shallow drainage channel scooped out by the rare rain that this arid ground may have seen during many centuries. The find was encouraging, especially as some of the records read there and then bore dates from 63 to 57 B.C. Yet it in no way prepared me for the big haul which was waiting here to be gathered next morning. While looking after the sinking of a well at our camping-place, a little over a mile to the south-east, I had sent Chiang Ssŭ-yeh ahead to continue the clearing. When I rejoined him an hour later, I found him triumphantly guarding for me nearly a hundred fresh Chinese wooden documents (T. VI. b. i. 47–140), most of them complete 'slips' and, in spite of slight damage from damp, still legible. There were close on a hundred more, either blank or completely effaced. The whole had been recovered from an area scarcely more than two feet square; in Fig. 172 the splintered piece of timber held by a labourer exactly indicates the place. None of these records lay deeper than about a foot from the surface, where the natural gravel was reached under the covering layer of reed-straw, chipped wood, and similar refuse.

Relics from office archive, 65–56 B.C.

By clearing the stratum of rubbish lower down the slope, where it gradually thinned out until the natural surface, hard gravel, emerged, the records T. VI. b. i. 141–88 were discovered. Subsequent excavation and careful search of the refuse round the place of the main find brought the total number of inscribed and still legible pieces to 310. Of blank slips, too, and of others which had completely lost their writing, another hundred or so were found. It was quite clear that at this particular spot the contents of a small official archive had been thrown down together on the rubbish-strewn slope. As M. Chavannes' careful examination has since established the fact that the very numerous dated records among them are all comprised within the years 65–56 B.C., we can approximately gauge the rate at which the 'waste papers' of the ancient office established at this station had grown during that period of ten or eleven years.

The rest of the rubbish-heaps on the slopes below the watch-tower, extensive as they were, added very little to the collection of documents. The slips T. VI. b. i. 311–20 were the only ones found above and below the main deposit just described. From another large layer of refuse, about a dozen yards to the west of the tower, came the records T. VI. b. iv. 1–3 and two fragments of small rectangular tablets, once apparently inscribed, T. VI. b. iv. 001, 002. A curious discovery was made in a shallow layer about sixteen yards to the north-west of the tower. Here was found a great mass of wooden 'shavings' covered with Chinese characters, probably over a thousand in all. It might have passed for a great find—if Chiang Ssŭ-yeh had not at once noticed that the writing was obviously by the same hand and the phrases constantly recurring. He was, no doubt, right in concluding that these were chips from improvised tablets which some officer or clerk, eager to improve his penmanship after the wont of the present-day *literatus*, had used again and again for writing exercises, planing them down with a knife each time to obtain a fresh surface. The material, roughly cut from tamarisk and Toghrak branches, was such as the jungle close by on the fringe of the marshy basin would furnish in plenty.

Chinese writing exercises on wood.

Abundance of Chinese records.

The abundance of the written records which the remains of T. VI. b have yielded is best illustrated by the fact that, among the 708 ancient Chinese documents which M. Chavannes by

[3] This fold of the slope is visible in the background of Fig. 172, behind the figure of the labourer.

reason of their legibility and interest has included in the first section of his publication,[4] not less than 256 (*Doc.*, Nos. 9–264), or more than one-third of the whole number, were obtained from this site. The relatively good preservation of a large proportion of them, and the fact that they all belong to the same period, chronologically well defined and not far distant from the establishment of the Limes, necessarily add much to the historical value they possess as original and contemporary evidence for the organization of this ancient military border line and the life led in the desert along it. In the review of the information to be gleaned from the written records of the Limes as a whole,[4a] the data supplied by the documentary finds of this station will be drawn upon more largely than those of any other individual site. Here, however, I must, in accordance with the plan followed elsewhere, restrict my remarks to those points which have a direct archaeological bearing on this particular locality and the section of the Limes belonging to it.

Records dated 68–56 B.C.

In the first place, the large number of dated records found at this station is worthy of mention. As a reference to *Doc.*, Nos. 37–58, 91–3, 158–60, 255, shows, their series covers the period 68–56 B.C. In addition to this, chronological evidence of great value is given by the numerous tablets forming parts of elaborate calendars, Nos. 9–24, 25–35, 36, in which the cyclical designations of particular days in each month are recorded. By a painstakingly exact and ingenious analysis M. Chavannes has established that these calendars were issued for the years corresponding to 63, 59, and 57 B.C. They were needed, no doubt, for the correct dating of official correspondence, accounts, etc., such as would issue from local head-quarters, and the fact that such calendar tablets were found at T. VI. b in so large a number, while the other stations on the Limes together yielded only three similar fragments in all, suggests that an office of some importance was placed here.

Chinese calendars of 63, 59, 57 B.C.

Imperial edicts concerning Limes.

The same conclusion may be drawn from the finds at T. VI. b, comprising four documents, *Doc.*, Nos. 60, 63, 142, 206, which reproduce or quote imperial edicts concerning the border line and the troops intended to guard it. The first among these is of distinct historical interest, as it records the emperor's orders for the establishment of an agricultural military colony in the Tun-huang region and the methods to be followed in the construction of a 'rampart' for guarding the border. No date is given in this very important document, *Doc.*, No. 60. But the contents of the imperial edict by themselves prove that it must belong to the period when the Limes was first extended to this region. This fact, taken in conjunction with the chronological range, 68–56 B.C., of the dated records already referred to, seems to me to justify the inference that the establishment of the flanking line of watch-stations to which T. VI. b belonged, and which were meant to be controlled from it, goes back to the very time when the construction of the westernmost Limes beyond Tun-huang took place, about the last years of the second century B.C. To this assumption, in fact, we are led by the very purpose which, as has been shown above, obviously determined the throwing out of this flanking defence. As soon as the Limes wall was continued to its natural end at the terminal basin of the Su-lo Ho, it became necessary also to watch the eastern edge of the latter.

When was T. VI. b abandoned?

It is more difficult to feel sure of the exact period when these outlying stations to the south-west of the termination of the Limes wall were abandoned. The latest of the documents with a precise date that have been found at them, T. V. 2, *Doc.*, No. 428, was, as already mentioned, written in 39 B.C. A somewhat later *terminus ad quem* is supplied by the small tablet T. VI. c. i. 3, *Doc.*, Nos. 4 + 265, which bears on its reverse a fragment of a well-known Chinese lexicographical work, the *Chi chiu chang*, composed between 48–33 B.C. The text was copied here, as M. Chavannes points out,[5] evidently as a writing exercise. Some time must necessarily have elapsed before a work of this class could have attained such vogue as alone can explain its study at desolate posts

[4] See Chavannes, *Documents*, pp. 10–151.

[4a] Cf. below, chap. xx. sec. iv–vi.

[5] Cf. Chavannes, *Documents*, pp. 9, 64.

of China's extreme western border. This vogue is attested by seven more fragments from the same work contained in my collection.[6] We are thus carried appreciably nearer to the period of the usurper Wang Mang, A.D. 9–23, after which, as I shall have occasion to explain further on, the westernmost section of the Limes wall proper, comprising the series of towers T. IV–XIII, was probably abandoned. All the same, there remains the notable fact that none of the great mass of records found at T. VI. b gives evidence of a date later than 56 B.C. Hence the possibility must be kept in view that, while the line of the flanking signal-stations that stretched from T. V to T. VI. d continued to be occupied as long as the western extremity of the Limes proper was held, i.e. probably down to the first quarter of the first century A.D., the station T. VI. b, lying behind the line, was abandoned half a century or so earlier. This may, perhaps, have been due to its reduced importance when there was less risk of raids from the Huns and the nomads in the mountains on the south.

Ling-hu, Yen-hu, and *Kuang-ch'ang* companies.

Almost as important as the document relating to the first establishment of the Limes is another record, T. VI. b. i. 152, *Doc.*, No. 63, which refers to an imperial edict about the organization of three companies named *Ling-hu, Yen-hu,* and *Kuang-ch'ang* respectively. The number of documents from T. VI. b mentioning the *Ling-hu*, or 'barbarian-dominating', company is so considerable, and the local bearing of the references made to it so obvious, that it is impossible to avoid the conclusion that the station T. VI. b itself was garrisoned by that company.[7] The name *Kuang-ch'ang* is not met with again; but the *Yen-hu*, or 'barbarian-subduing', company is found repeatedly in records which indicate a special local connexion with T. VI. b and its immediate neighbourhood. In Nos. 138, 139 (T. VI. b. i. 19, 235) we have orders addressed to a certain indigenous officer charged with the safeguarding of the Yen-hu area, and No. 49 (T. VI. b. i. 91) contains a report from the commandant of the Yen-hu company which refers to 'indigenous officers'. Seeing that the same company is named in No. 268, a brief record found at T. VI. c, and that at this very place I discovered the fragment of a wooden document in Early Sogdian writing,[8] there is a temptation to recognize in that neighbouring station T. VI. c the locality which was guarded by the Yen-hu company and the native auxiliaries connected with it.[9]

'Indigenous officers' with *Yen-hu* company.

Post T. VI. b and *Ta-chien-tu* section.

A number of documents found at T. VI. b make it very probable that the station was in administrative matters linked up with, and dependent on, Ta-chien-tu, which, as explained above,[10] may be identified with the terminal western section of the Limes proper, T. IV. a–c. Thus Nos. 51, 137, 138, 168 convey direct orders from the commandant of *Ta-chien-tu*. There is yet another locality mentioned in the records of T. VI. b which can be determined, I think, with great probability, if not practical certainty. I mean the watch-post *Pu-ch'ang* 步昌. The documents Nos. 58, 83, 144, 145, which mention its commandant and an indigenous officer from it, afford no topographical evidence. But all the more precise is the information which, with our knowledge of the actual ground, can be deduced from No. 95, a very clear and well preserved tablet (T. VI. b. i. 162, *Doc.*, Plate V). It records a statement about the fatigue duty performed by three men, obviously belonging to the

Watch-post *Pu-ch'ang.*

[6] Cf. regarding these text fragments, Chavannes, *Documents*, pp. 1 sqq.; below, chap. XX, sec. vi.

[7] See M. Chavannes' note on *Doc.* No. 38. Particularly significant in this respect are Nos. 38, 42–45, 47, 48, 64–69, all containing receipts, statements, lists, etc., relating to the internal administration of the *Ling-hu* company; Nos. 54, 56 announcing verbal orders from the commandant of it; No. 70, labels inscribed with its name and evidently intended for attachment to articles sent to, or owned by, men belonging to that company. It may be noted as negative evidence for this location that the name of the Ling-hu company is not met with elsewhere.

[8] About this interesting find and its possible connexion with the 'indigenous officers' of *Yen-hu*, see below, pp. 652 sqq.

[9] The records Nos. 71, 136 (T. VI. b. i. 296, 250) afford no decisive evidence, but can be reconciled with the suggested location. The first is an inventory of cross-bow ammunition issued to certain men of the Yen-hu company; the second mentions its commandant in what seems an indorsement of a certain notification.

[10] Cf. above, pp. 636, 641.

detachment stationed at T. VI. b, who were sent to Pu-ch'ang to fetch grain. On two successive journeys they carried six sacks altogether. 'This makes a total of 188 li and 120 steps for going and coming, that is for each man 62 li and 240 steps.' Leaving aside the meticulous addition of 120 steps to the total, as the ancient 'military Babu' himself evidently did when he calculated the average distance done by each man, and taking 360 steps as the recognized standard for 1 li, we get $62{\cdot}66 \div 2 = 31{\cdot}33$ li as the distance covered on each journey, and consequently 15·66 li as the distance between T. VI. b and Pu-ch'ang.

Pu-ch'ang post identified with T. VI. a.

If we look at the map and consider the character of the ground, it is quite clear that supplies of food-stuffs reaching T. VI. b from a permanently occupied post could come only from the side of the Limes line proper, the whole length of which, I may note here, is practicable for carts.[11] The watch-station nearest to T. VI. b on that side is T. VI. a, and the direct distance to it just three miles. This converted into li at the rate of 5 li for the mile, which I have found the approximately constant average for early Chinese measurements of distance in Central Asia, gives us exactly 15 li.[12] The agreement with the distance recorded to Pu-ch'ang is complete, considering that allowance must be made for its slightly greater length by road, and I therefore think it practically certain that the watch-post of Pu-ch'ang must be identified with the ruined station T. VI. a.

Position of *Kuang-wu* post (T. v?).

Furthermore, we find in T. VI. b. ii. 7, another perfectly clear record (*Doc.* No. 258, Plate VIII), the posts of Pu-ch'ang and Ling-hu, i. e. T. VI. b, mentioned together as evidently adjacent stations to which the watch-post of *Kuang-wu* sends on a message for the purpose of circulation.[13] The location of Kuang-wu at the ruined station T. V, the next to the north, naturally suggests itself; but as the name is not found again it is impossible to test the conjecture.

Miscellaneous relics from refuse.

Leaving the points of general interest for the history and conditions of the Tun-huang Limes that are presented by the records to be discussed in Chapter XX, I may conclude this account of T. VI. b with brief references to some of the miscellaneous relics found among the refuse-heaps. They were by no means as plentiful as might have been expected from the great extent to be searched. T. VI. b. i. 001-004 (Plate LII) are wooden pegs of a curious type, which was found abundantly represented elsewhere along the line of the Limes (see T. 002 in List). Its purpose has not yet been determined. The pegs resemble in shape the usual tent-peg and have a flattened triangular section; their top is roughly cut and painted to give it the appearance of a human head. From the wear usually shown by the pointed end it is safe to conclude that these pegs were meant to be driven into the ground; but they are certainly not strong enough to have served as real tent-pegs, especially in a region exposed to such violent winds. T. VI. b. i. 009, 0011 are remains of shoes, made mainly with woven string, apparently of hemp, and after a pattern illustrated in Plate LIV by specimens from other stations on the Limes. The fibrous material of which the string used in these shoes is made deserves a more exact examination, in view of the record on a slip from this very station, T. VI. b. i. 102, *Doc.*, No. 96 (Plate V). It contains a 'fatigue' statement of three men who had been sent to collect hemp for shoes. As each covered only 10 li in going and coming, the plant must have grown quite close to the station, probably on marshy ground.[14]

Hemp for shoes.

[11] We do not know what particular reason necessitated the transport of this grain from Pu-ch'ang by men. But it is certain that the configuration of the intervening ground must have made, then as now, transport by cart, always with Chinese the most favoured form of conveyance, impossible. I had practical demonstration of this myself in May, 1907, when badly needed supplies, which I had ordered from Tun-huang and, of course, expected by camels, were brought up in a cart. It managed to reach as far as C. 171, after which the steepness of the plateau slopes made progress impossible. So camels were sent back to bring the supplies on to our camp near T. VI. b.

[12] Cf. e.g. *Ancient Khotan*, i. pp. 32, 233, 435, etc.; above, pp. 320, 621.

[13] Whether it is possible in any way to connect *Kuang-wu* 廣武 with the name of the *Kuang-ch'ang* 廣昌 company mentioned above, p. 648 (see *Doc.* Nos. 62, 63) I must leave to others to consider.

[14] I may note here that a hemp plant growing along the

Paper mulberry fibres in textile.

Among the fragments of miscellaneous fabrics attention may be called to a close-woven buff material, T. vi. b. i. 0013, in which Dr. Hanausek's careful analysis has recognized bast-fibres of some Moracea, 'most probably of the *Broussonetia papyrifera*, L., Vent.: the paper mulberry-tree of China and Japan'. The discovery of a textile from this fibre, which in view of the place of its find can safely be assigned to the first century B.C., is of considerable antiquarian interest. For it proves that when Ts'ai Lun in A.D. 105 made the memorable discovery of the first real paper, he had the textile use of the *Broussonetia papyrifera* bark to guide him to the employment of the same fibre in a macerated state. We know from Chinese sources that the bark of the paper mulberry-tree formed, together with hemp and old fishing-nets, one of the three materials which Ts'ai Lun used from the first for his new invention.[15] This bark has remained ever since the most common material for paper manufacture both in China and in Central Asia. It is, therefore, of importance to have definite proof furnished by the fabric from the refuse-heaps of T. vi. b that the fibres of the *Broussonetia papyrifera* had been utilized for textile purposes more than a century before Ts'ai Lun's invention. It is a fact illustrating once again the close connexion which Chinese attempts at the production of paper had, from their very start at an even earlier period, with the textile industries of the country.[16] And here I may note in passing that, with all the abundance of records at T. vi. b, not a single scrap of paper was found in the refuse deposits of the station. This fact furnishes a striking confirmation, albeit a negative one, for the accuracy of Chinese historical tradition concerning the invention of paper.

Paper mulberry bark in early Chinese paper.

Stack of fascines for signal fires.

There still are left to be noticed the half-petrified remains of six stacks, built up of fascines and permeated with salt and coarse sand, which I found at intervals of 20–30 yards along the edge of the plateau to the east and south-east of the ruined station, and not far off. The fascines were neatly arranged in alternate layers consisting of thin Toghrak branches and reeds, the fascines in a layer being placed parallel to each other and crosswise to those of the layer next below and above. Whether made up of branches or of reeds, they averaged 7 feet in length, and the square stacks in which they had been neatly built up originally were of the same measure. Erosion and abrasion by wind-driven sand had reduced the stacks to a height varying from only a few inches to a foot or two. I had found similar and better preserved stacks before at other stations of the westernmost Limes, and it will be convenient later on to examine their character and exact purpose more fully.[17] Here it will suffice to point out that, as the material of the fascines manifestly indicates, the main purpose of their collection was use for lighting signal fires.

Optic telegraphy by fire-signals.

We shall have occasion further on to discuss the abundant documentary and other evidence which my explorations have yielded as to the extensive use, made along the whole line of the Limes, of the system of optic telegraphy by means of fire-signals, which is also attested by Chinese historical sources for different periods.[18] It is obvious that such readily inflammable materials were the best for sending up flares quickly, and that the adjoining jungle belts could supply them in abundance. It is of some local interest to find that the receipt and dispatch of fire-signals is repeatedly mentioned in the records of T. vi. b (see *Doc.*, Nos. 61, 84–7, 172), and also that the collection of small pieces of firewood is as one of the various 'fatigues' of the men at this station (*Doc.* No. 124).

terminal Tārīm is extensively used by the Lopliks for ropes, strings, etc., and forms a useful article of export to the oases on the west.

[15] Cf. Chavannes, *Les livres chinois avant l'invention du papier* (*J. Asiat.*, jan.–févr., 1905), pp. 5 sq.; also *Ancient Khotan*, i. p. 135 and the papers of Prof. J. v. Wiesner there quoted. To these must be added now the lucid explanations furnished by this distinguished scientist in his paper: *Über die ältesten bis jetzt aufgefundenen Hadernpapiere*, Sitzungsber. der K. Akademie der Wiss., Wien, 1911, pp. 3 sq., 8.

[16] Cf. Chavannes, *Les livres chinois*, etc., pp. 8 sqq. for the exact parallel furnished by the silk floss which was used for the production of a kind of paper earlier than Ts'ai Lun's invention.

As regards the earliest specimens of rag paper discovered at T. xii. a, see below, pp. 672 sqq.

[17] See below, pp. 677 sqq.

[18] Cf. below, Chap. XX. sec. vi.

The fact that the length of the fascines in these stacks was always found to agree with that of the fascines used for the construction of the Limes wall necessarily attracts attention. It had led me, when I first discovered such stacks at the stations T. xii. a, xiii, to assume that the fascines had been stored primarily for the purpose of rapid repairs of the wall. Since it is certain that there was no wall extending along the flanking line of watch-stations by the side of the marshy basin, the discovery of the same stacks at T. vi. b affords definite evidence against this assumption. But the use of the fascines for repairs of the wall, where there was one, is likely enough to have been also intended. In any case, it seems reasonable to connect the special dimension of these stacked fascines with the standard size for wall fascines, which must have been determined by the regulation thickness of the wall. **Fascines as used in Limes wall.**

Section IV.—THE LAST WATCH-TOWERS OF THE LIMES, T. vi. c and d

The structural observations made at the ruin of T. vi. b were supplemented in an interesting fashion when I explored the outlying watch-post, T. vi. c (see plan in Plate 37). Situated about three miles further west, it occupies an ideal position on the flat top of a small and completely isolated clay terrace. This rises as a conspicuous landmark to a height of fully 150 feet above the surrounding low ground, and represents the last offshoot westwards of the tongue-like plateau which bears the remains of T. vi. b. Its top completely overlooks the great basin, which is covered near by with scrub and scanty growth of Toghraks, but which, from less than half a mile to the west, is a bare salt-encrusted marsh with here and there open sheets of water. The precipitous wall-like slopes of hard clay, which erosion is slowly but steadily undermining at their foot, made access to the ruin quite impossible except from the narrow eastern end of the terrace, where a steep ravine descends about half-way. Even there I had to use my hands in climbing. The flat top of the terrace, about 80 yards from east to west and nowhere more than 30 yards across, seemed like the roof of a huge natural keep, and its defence correspondingly easy. But what must have formed its chief recommendation for those who laid out the line of these watch-stations was, no doubt, the wholly unbroken view it commanded to the west and the south. **Natural strength of terrace bearing T. vi. c.**

Standing on such ground, which its height and isolation equally protected from abrading drift-sand and from damp, the tower had survived in a very fair state of preservation. As seen in Plate 37, it formed a square of twenty feet at its base. This occupied the top of a small natural clay terrace rising 3½ feet higher than the floor of the quarters adjoining on the east and south. The sun-dried bricks used for the walls of the quarters, as well as for the solid masonry of the tower, measured 14½ by 7 inches, with a thickness of 5 inches. The tower tapered slightly towards its top, and there, at a height of about 16½ feet above the floor, were the remains of a small room, 7½ feet square, which was obviously meant to serve as a place of shelter for guards. I subsequently found evidence that similar little watch-rooms had once been provided on the top of other towers of the Limes. But owing to more advanced decay they were rarely traceable with equal clearness. A shallow hollow observed on the east face of the tower probably marked the position of the footholds which aided the watchmen in climbing up to the top by means of a rope. **Well-preserved tower T. vi. c.**

The quarters adjoining the tower had suffered more decay, and their walls, thickest outside, stood nowhere more than 4 feet above the ground. But a uniform cover of débris, in which decayed bricks mingled with reeds and timber from the roofing, had afforded protection for any small relics that had been left behind after the post was abandoned. The arrangement of the rooms bore a distinct resemblance to that in T. vi. b. The small ante-room iv was entered by **Quarters at T. vi. c.**

a narrow passage built along the south foot of the tower. On either side of the doorway might be seen the sockets meant for the insertion of heavy bolts, about 4 by 5 inches in section, which once barred the door. In the narrow passage along the east foot of the tower, which seems to have been intended for stairs but did not contain any, the original whitewashed plaster of the tower still showed behind the rubble of hard clay with which the end of the passage had been walled up at a later time.[1] The innermost room i is likely to have been used for the commandant's accommodation, and here half a dozen wooden records, all fragmentary, were found, besides the neatly ornamented fragment of a lacquered bowl.

Miscellaneous relics from T. vi. c.

The room iii, which may have been used for the men's quarters, yielded two wooden brackets, T. vi. c. iii. 002, 003 (Plate LIV), of the type already described which served for hanging up clothes, equipment, &c. There, too, was found the curious wedge-shaped wooden block, T. vi. c. iii. 001, inscribed with two Chinese characters no longer legible, to which reference has already been made in connexion with a similar find from T. vi. b.[1a] It was strange to find a quantity of perfectly fresh-looking horse dung, with remains of green reeds cut into straw, under the débris of the little ante-room iv. This measured less than 7 feet across, and could have barely allowed the horse to turn round. These tight quarters recalled life on board ship, and served to illustrate the need of shelter which in such an inclement climate was felt here even by animals. Elsewhere, too, I have made similar observations about stabling. In the entrance passage ii I came upon a neatly decorated leather tongue, T. vi. c. ii. 002 (Plate CX), which probably formed the end of a saddle strap, and what may have been part of a wooden lock, T. vi. c. ii. 001.

Wooden tablet with Early Sogdian script.

But the find which is of most interest was made just within the doorway or a few inches beyond. It was the remarkably well-preserved right-hand portion of a thin wooden tablet, T. vi. c. ii. 1 (Plate CLVII), 10½ inches in length and in its present state about 1½ inches across. It showed at the top four short lines in an Aramaic-looking, then as yet unknown, script, which I had first come across in a paper fragment of the Lou-lan site, L.A. vi. ii. 0104, and subsequently in the important find of paper documents made at the Limes station T. xii. a. As I shall have occasion to explain when discussing this find, the script, first partially deciphered by Dr. A. Cowley, has since been identified as Early Sogdian by M. Gauthiot.[2] The untimely death of this gifted collaborator has removed for the present all hope of securing some indication of the possible meaning of the short inscription. But the very place of discovery and the external appearance of the record may help us to realize its antiquarian import.

Script points to Iranian auxiliaries.

In the first place, I think, due stress must be laid on the fact that the tablet was found at an outlying watch-station of the Limes, far away from the line which the ancient trade route had followed. This speaks strongly against any assumption which might attribute the document, written in a script of Western Asiatic origin, to traders or other mere passing visitors from that side. Together with the wooden material, which is obviously local, this consideration made me wonder at the time whether the discovery of the relic at the far-off post T. vi. c might be due to the presence among its garrison of men drawn from that Iranian portion of Central Asia, Sogdiana, and the adjoining regions, with which I was already inclined to connect both the script and the language of the record.[3]

This conjecture has since found distinct support in certain documents of T. vi. b, briefly

[1] The symbol for this later rubble wall is wrongly described in the explanatory list of Pl. 37 as 'débris of bricks and clay'.

[1a] See above, p. 645.

[2] See below, pp. 675 sq.; also above, p. 383.

[3] I find that this view, which M. Gauthiot's analysis of my Early Sogdian finds and M. Chavannes' decipherment of the Chinese documents referred to below have so strikingly confirmed, had already been recorded in my original diary notes of May 6, 1907, written at Camp 172.

mentioned before, which are addressed to, or speak of, 'indigenous officers' of the *Yen-hu* company. I have already given reason to believe that this company was entrusted with the guarding of the station T. VI. c, or else posted close to it at T. VI. b.[4] Thus *Doc.* No. 138 advises 'Fang, the indigenous officer (*fonctionnaire indigène*,) charged with the guarding of the territory of *Yen-hu*', of an order verbally transmitted through a certain messenger by Ying, chief of the Ta-chien-tu post. No. 139 is an exactly similar order addressed to the same 'indigenous officer' of Yen-hu, but without stating his name or that of the sender. No. 51, not completely deciphered, is an order emanating from the same 'Ying, chief of the Ta-chien-tu post', and giving directions about an inspection of the 'barrier' to a certain 'indigenous officer', whose name and place, however, have not been made out. In No. 49, an incomplete 'slip', the chief of the Yen-hu company itself refers to 'indigenous officers', evidently of his own command. Such officers, belonging to the Pu-ch'ang station, are mentioned again in Nos. 144, 145, while in No. 140 we have an order addressed to a certain *Chung-chung-êrh-êrh-tzŭ*, whose name is recognized by M. Chavannes as clearly that of an indigenous officer.[5]

'Indigenous officers' in T. VI. b records.

There is no direct information in the records from the Limes to guide us as to the race from which these 'indigenous officers' and the men under them may have been drawn. But the employment of foreign mercenaries from 'outside the barrier' for help in guarding the Limes was certainly in full agreement with the policy which, as the Han and T'ang Annals abundantly demonstrate, was followed by the Chinese throughout their dealings with the 'Western Regions', whenever there was an effective endeavour to expand imperial control into Central Asia.[6] It is a policy which has been maintained even in our own days and is illustrated in a characteristic fashion by the employment of such local auxiliaries as Kirghiz for the guarding of outlying border posts, e. g. on the Chinese Pāmīrs and on certain routes leading across the K'un-lun southward. We have exactly analogous evidence of a documentary kind for the period immediately following the Later Han; for records which have been discussed above mention Yüeh-chih, or Indo-Scythian, soldiers among the garrison of the Chinese station at the Lou-lan Site.[7]

Foreign auxiliaries of Chinese.

It would be of little use to discuss such conjectural explanations as our present knowledge would allow us to suggest for the employment of soldiers of Sogdian or other Eastern Iranian origin on the Tun-huang border in the first half of the first century B. C. But I may well call attention to a very interesting historical parallel. M. Pelliot's important researches have established, partly from Chinese texts in my collection of Tun-huang manuscripts, that a Sogdian colony under a chief from

Old Sogdian colonies in E. Turkestān and China.

[4] Cf. above, p. 648. That the *Yen-hu* company is named in No. 268, a record actually found at T. VI. c, strongly supports this location. Unfortunately it is a mere fragment and hence cannot afford definite proof.

[5] It is, perhaps, not mere chance that in five of these documents, viz. Nos. 138, 139, 140, 143, 144, addressed to 'indigenous officers', the subject of the order is not specified, being obviously left to be verbally explained by the messenger whom the tablet was intended to accredit (cf. M. Chavannes' note on No. 138).

The method of not writing out detailed orders to 'natives', who in any case were not likely to be able to read them in person, had its manifest advantages—for the clerical staff at any rate. Cf. also Chavannes, *Documents*, p. 21, and for a similar practice, noticed with regard to many 'demi-official' Kharoṣṭhī documents of the Niya Site, above, p. 216.

Here it may be mentioned that, out of the eleven documents from the Limes in which indigenous officers are mentioned, not less than eight were found at T. VI. b. This seems to point distinctly to a policy of employing these foreigners on the outlying flank, which was, perhaps, considered less important than the line facing the enemy to the north. Among the remaining three documents, Nos. 375, 552 come from the 'Jade Gate' and its subsidiary station T. XV. a, No. 681 from T. XI.

[6] This policy is well summed up in the pregnant words used by the great Chinese general Pan-Ch'ao in his memorial to the throne, A.D. 78: 'Se servir des barbares pour attaquer les barbares, c'est là le meilleur parti à suivre'; see Chavannes, *Trois généraux chinois*, *T'oung-pao*, 1906, p. 226. This significant advice was given with a view to re-establishing Chinese political control throughout the Tārīm Basin and extending it westwards.

[7] Cf. above, pp. 411 sq.

Samarkand existed in the Lop tract during the seventh century A. D.[8] And, as he has justly added, there is equally authentic evidence to prove also that at that later period colonies of Sogdian emigrants were to be found still further away to the east and north, at Turfān, Kara-balgasun, and even in distant Hsi-an-fu.[9] There would, therefore, be no reason for surprise if subsequent discoveries and researches were to prove the correctness of my conjecture with regard to the character and significance of this solitary small document in Early Sogdian, T. VI. c. ii. 1.

Early Sogdian tablet probably tally.

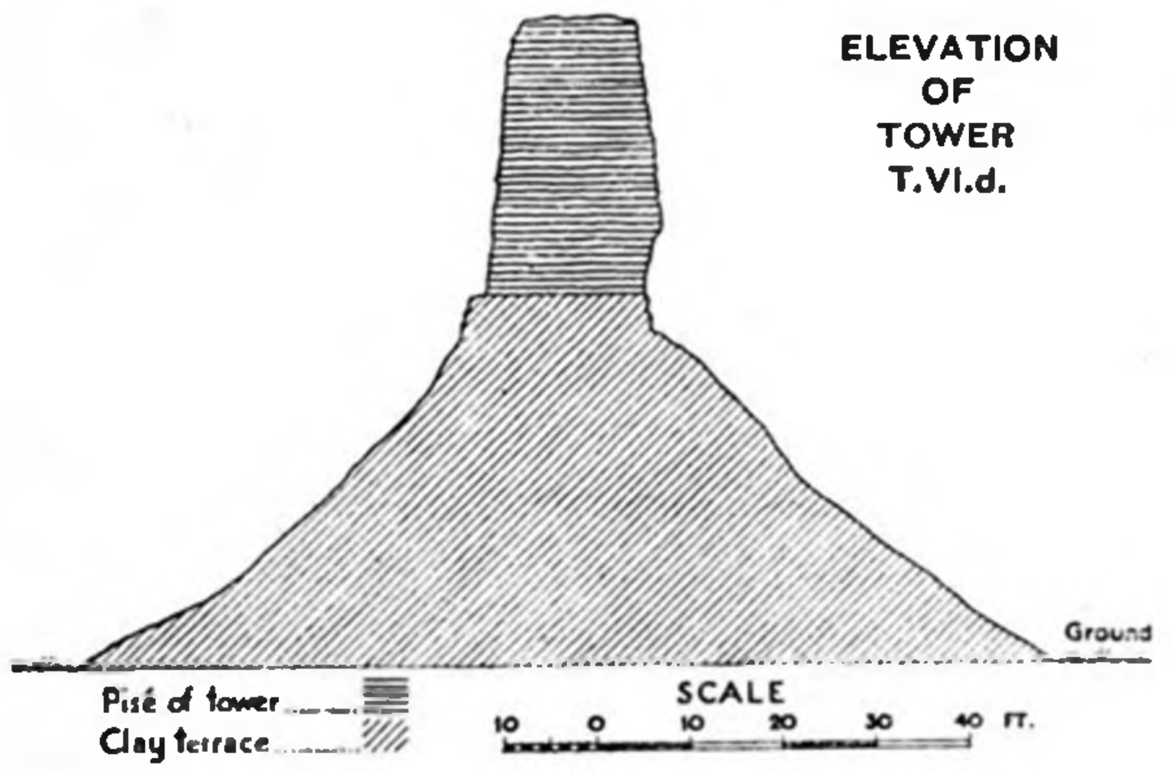
I may add in conclusion that the very appearance of the tablet suggests a further antiquarian argument for its having been written and intended to be read on this very border. As the reproduction in Plate CLVII shows, it looks distinctly like the right half of a larger inscribed piece cut through on purpose to serve as a tally. This is proved not only by the clean edge at the cutting, but also by the manifest monogram or signature which appears below the writing, together with the half of a symmetrical diagram.[10] It seems quite certain that the tablet was cut into two exact halves and was, no doubt, a device as carefully thought out as many other details of the ancient stationery in wood that I have so often had occasion to examine.

SE. edge of terminal basin.

On May 7 I visited, from Camp 172, the watch-tower T. VI. d, the last of the line to the south-west. As the intervening ground was quite impracticable bog, a considerable détour had to be made to the south, necessitating a ride of fully 10 miles to reach it. It took me round a great open bay of the terminal basin, where I passed a number of springs with fairly drinkable water that gathered on sandy soil covered with thin reed beds. It was of interest to notice the short ridges of drift-sand up to about 15 feet in height which lined the spring-fed channels draining towards the great marsh bed. They were evidently due to the narrow strips of scrubby vegetation, kept alive by the springs, which detained the drift-sand and caused it to be piled up by the winds. These fixed dunes seemed to illustrate clearly, though on a small scale, the formation of the big ridges of sand, or 'Dawāns', which, as I have often mentioned, accompany all the courses, dried up or still existing, of the rivers that pass through, or lose themselves in, the Taklamakān and Lop deserts.[11]

Watch-tower T. VI. d.

All this low open ground was completely overlooked by the tower T. VI. d (see sketch below), though the isolated clay terrace, or 'witness', on which it stood did not rise to a height greater than about 40 feet. Its top was just large enough to afford room for the base, 20 feet square. The tower was built of layers of stamped clay, with reeds inserted at short intervals, and had remained practically intact, rising to a height of about 30 feet. On the top, which tapered to about 13 or 14 feet square, a brick parapet survived; but this could not be examined as it was impossible to climb up without appliances. On the east face of the tower shallow footholds were visible which must have helped the watchmen when clambering up by means of a rope. On the same face, and at a height of about 10 feet from the ground, several Toghrak beams emerged from the masonry, supporting a mass of clay which may possibly have been intended as a rest for a ladder.



[8] Cf. Pelliot, *La colonie sogdienne de la région du Lob Nor*, *J. Asiat.*, janvier–février 1916, pp. 115 sqq.; regarding the Lop localities mentioned in connexion with this colony, see also above, pp. 306, 327.

[9] Cf. *ibid.*, p. 123.

[10] The damage in the middle of the edge on the right side was caused by an accidental hit with the *ketman* in the course of digging.

[11] See above, pp. 241, 451 (note 2 for further references).

At the east foot of the tower the clay of the supporting terrace had crumbled away to some depth. Yet the tower still stood with but little damage even on that side, a striking proof that wind-erosion has had a very limited effect on this particular ground, which vegetation of some sort and marshy surface protected. The same fact was demonstrated by the terrace rising with easy slopes of soft clay, unlike the steep clay walls, undercut by erosion, of the terraces further north. I attribute the difference at T. VI. d to the fact that the marshy belt bordering this tower on the east and north prevented the prevailing east and north-east winds from attacking it with their most powerful weapon, the abrading, wind-driven sand. Unable to ascend to the top of the tower or to discover any trace of the quarters which are likely to have once adjoined it, I had to rest content with some small fragments of silk fabric picked up among the clay detritus at the foot as the only relic of ancient occupation.

Wind-erosion limited at T. VI. d.

Though the view to the south and west from T. VI. d was wide and open, I could sight nothing to suggest the existence of any other watch-stations. On a previous reconnaissance Surveyor Rām Singh, in accordance with the instructions given, had pushed from T. VI. d for over 9 miles straight to the west, and even further to the south-west, without discovering any other towers or remains. Consequently, I feel justified in concluding that this was the furthermost watch-post thrown out on the terminal flank of the Limes. From it the ground over which any possible attack might be made, or escape from 'within the barrier' attempted, could be watched with ease for a great distance. The 'coast-line' of the wide marshy basin is uniformly low towards the south, and shows none of those long narrow inlets which characterize the 'coast' to the east and north-east. Apart from a small and low tongue close to the west of T. VI. d and overlooked from it, there are no projecting ridges or detached terraces for a considerable distance on this side. From the low clay cliffs of the 'coast-line' the gravel 'Sai' slopes up like a perfect glacis towards the rampart of huge dunes in the south, which has been previously mentioned. Right up to their foot, over twelve miles away, its absolutely bare surface was open to the view as I stood at the base of T. VI. d. Once more I felt impressed with that eye for topography which seems never to have failed the old Chinese designers of the Limes.

T. VI. d commands S. 'coast' of basin.

How serious an obstacle is presented on the south by the impassable nature of that great rampart of dunes was brought home to me when, towards the end of my explorations on this ground, I dispatched the Surveyor with most of the mounted men from Camp 172 to reconnoitre the ground on the south-east and, if possible, to push through to the route leading from the mountains to Nan-hu (Map No. 75. C, D. 1). After a trying march for three days across the waterless waste he rejoined me, having been effectively baffled by the closely packed dunes which he encountered from about twenty-five miles' distance onwards, and which, after another ten miles or so, forced him to turn back and thus save his ponies from exhaustion. If ever there was a direct route followed from Nan-hu or the 'Yang barrier' to the stations on the south-western flank of the Limes, it must have lain across the gravel 'Sai' further north. But I have reason to doubt its existence.

Impassable rampart of dunes on S.

CHAPTER XVIII

THE WESTERNMOST LIMES WALL

Section I.—FROM THE WESTERN END OF THE WALL TO T. VIII

Line of Limes wall towards T. III.

We may now return to the terminal western point of the Limes proper and proceed to survey in due order the remains of its wall and watch-stations to the east of T. IV. b. Close to this tower the ground is much broken by small Nullahs, and it would be difficult now to pick up the line followed by the wall of the Limes but for the conspicuous sign-post which is supplied by the tower T. III. Towards this the wall was directed in a straight line keeping close to the northern edge of the plateau. From about one mile onwards it could be followed running almost unbroken, but surviving only to the height of a few feet and embedded mostly in coarse sand or in light gravel.

Remains of tower T. III.

The remains of the tower T. III (Fig. 149; Plate 36) and the interesting discovery made at the wall near it have already been so fully described in Chapter XIV, in connexion with my first explorations along the Limes,[1] that nothing remains to be added here. The Descriptive List below shows the few miscellaneous relics which were found on clearing the ground at the foot of this tower. In the same way I may refer to that chapter for a detailed account of the remarkably well-preserved stretch of the wall which I found extending almost continuously for a distance of a little over 3 miles in the direction of the next tower, T. VII.

Rut parallel to Limes wall.

But I may here record an observation which adds considerably to the interest of this stretch of wall, but which was not made until I passed along it again on a later occasion with the experience gained through preceding explorations of the Limes. Then, with the slanting rays of the afternoon sun behind me showing up the line of the wall quite distinctly for miles, as it descends from T. III towards the depression near T. VII, the eye readily caught a curiously straight furrow-like line running parallel to the wall and keeping always at a distance of about 8 to 9 yards within it. I had first noticed exactly the same shallow little depression, stretching along the wall and at the same distance from it, to the east of the tower T. XIII, where there is a stretch of wall preserved to even greater height, as seen in Fig. 176. Subsequently I recognized it elsewhere, too, as e. g. near T. XII. a, and between T. XV and T. XVII. Close examination showed that the well-marked depression was always from $1\frac{1}{2}$ to 2 feet wide and its bottom sunk to an average of about 5 inches below the hard gravel surface of the ground.

Ancient track traced along Limes wall.

Repeated observations convinced me that this strangely regular rut marked the narrow but well-defined track worn into the gravel soil by the patrols who tramped along the wall for centuries. There was no possibility of individual illusion, because this line and its character were recognized independently by different members of my party and along widely distant sections of the wall, not only in the course of the explorations of 1907 but also when I revisited this westernmost portion of the Limes seven years later. Significant, too, was the fact that this strange uncanny track was

[1] See above, pp. 568 sqq.

found to reappear along sections of the wall which, just as here between T. III and T. VII, were far away from the caravan route, and where consequently it was manifestly impossible that it was of modern origin. On the other hand, it was easy to account for its preservation in those particular places. The track was to be found only where the actual line of the wall had suffered less from erosion, and the same local circumstances, such as relatively low ground less exposed to the full force of the winds and direction parallel to that in which they usually blow, would account for the survival of both wall and track.

Old wheel tracks on gravel soil.

All the same I might have hesitated about adopting this simple explanation, had I not had such abundant occasion to convince myself of the remarkable persistence with which this gravel soil of an arid desert, so rarely affected by rain or snow-fall of any extent, retains all impressions such as footprints or wheel-tracks. Frequently the latter were found running to depressions which may at one time have afforded some grazing or fuel, but where both these inducements to visits on the part of the cart-loving cultivators or herdsmen from the Tun-huang oasis must have disappeared for many years past. Yet the tracks left even by a single vehicle which had thus crossed the Sai were usually quite clear and continuous. And here I may note at once that when in 1914 I moved again over this ground, I found particular wheel-tracks of the same kind in a condition, as it seemed to me, practically unchanged. I had specially noticed them seven years earlier and still remembered them, either because they led in a direction difficult to account for, e. g. across the line of the wall, or for some similar reason. I have thus been led to the belief that the relative frequency of these wheel-tracks met with on utterly desolate ground, such as that south of the line T. VIII–T. XIV, has to be explained by their being made during a prolonged period, and that the fainter ones among them may date back far—a century or perhaps more.

Own footprints traced after seven years.

But in the course of the explorations of April–May, 1907, I had already noted with surprise that the footprints which we ourselves and our ponies had left on the ground when we first traced the wall on our journey to Tun-huang along the section lying close to the caravan route, from T. III to T. XI, looked two months later absolutely as fresh as if we had just passed by. Yet I was well aware from sad experience of the force of the winds which in the interval had blown almost daily over the great desert basin. Hence I felt less surprise when, on my return in March, 1914, and on following once again the line of the Limes from T. IV. a right through to T. XIV, I could quite distinctly recognize my own footprints of seven years before in many places where the soil was of the right sort. I could, though less frequently, even make out those of my little fox terrier, 'Dash II', the ever faithful companion of that journey. Exactly corresponding observations are well known to geologists and have often been reported from desert areas, widely distant in geographical distribution, but presenting similar surface conditions. Thus Prof. J. Walther quotes the case of a wheel-track in the Californian desert which after 11 years was found to look perfectly fresh, and that of camel footprints in the Sahara, dating from 1877 and still quite clearly recognizable in 1892.[2] I am unable to ascertain at present whether any ancient tracks, resembling in character the patrol path discovered along the Tun-huang Limes, have been traced on desert ground of regions like Egypt, Arabia Petraea, or Tunis where climatic conditions, on the one hand, might permit of their survival, and archaeological evidence, on the other, as clear as that of our Limes might be forthcoming to settle their date.

Watch-tower T. VII.

In Chapter XIV I have already given a full description of the watch-tower T. VII, which completely overlooked the depression there crossed by the line of wall coming from T. III. A subsequent close search of the ground near this tower yielded only scanty fragments of ancient

[2] Cf. J. Walther, *Das Gesetz der Wüstenbildung*, 1900, p. 54, with a reference to Foureau, *Au Sahara*, reviewed in *Petermann's Geogr. Mittheilungen*, 1897, xliii, Beilage, p. 175.

pottery and the well-preserved small bronze buckle, T. VII. 001, shown in Plate LIII. I have also described above how on my first passage the line of wall was picked up again on the gravel plateau to the north-east of T. VII, after having been lost for about a mile from this tower onwards.[3] Its total disappearance just at this point, where the present caravan route from Lop passes within the line of the ancient Limes, is certainly curious.

Excavation of quarters at tower T. VIII.

Continuing eastwards along the well-marked *agger* formed by the remains of the wall, I had then come, nearly 3 miles from T. VII, upon a small mound which lay about 24 yards to the south of it (Fig. 166). Pieces of timber protruding from the north-east corner and stones lying on its top had suggested that it was the much-decayed ruin of a watch-station, and the excavation started on April 14 immediately after my return to the Limes soon confirmed the surmise. The mound measured about 45 feet in diameter on the ground level and rose to about 10 feet above it. From the coarse gravel which covered its top and slopes, as seen in Fig. 166, there first emerged on the north-east rough Toghrak posts and plentiful bundles of reeds embedded in masses of sun-dried bricks. They soon proved to be the débris of the tower, which in its fall had completely crushed and buried the walls and roofing of the adjoining quarters. The clearing of this débris was heavy work for my small band of Chinese labourers, as yet untrained for such tasks and all opium-smokers; but it was at once rewarded by interesting finds and, when it was completed, it showed the plan of the tower and the quarters fully and clearly.

Tower plastered and white-washed.

As seen in Plate 38, the tower measured 23 feet square at its base and was built of bricks, measuring 14 by 7–8 inches, with a thickness of 4–5 inches. At the north-east corner, which the photograph in Fig. 168 shows after excavation, the brickwork still stood to a height of about 6 feet. Where, on the north and east, quarters had been built against the base of the tower, the face of the latter retained a heavy coating of plaster and whitewash, amounting to 2–3 inches in thickness altogether. Naik Rām Singh, an expert in such matters, counted here no less than 13 successive coats of whitewash, with 4 or 5 replasterings in clay. It is very probable that we have here an illustration of those recoatings of walls which are mentioned, with details as to the procedure and the square surfaces treated, in numerous records from T. VI. b (*Doc.*, Nos. 102–11). It is certain that these frequent plaster coatings, so familiar in all countries of Asia where sun-dried bricks are used, were applied to the faces of the watch-towers not only for repair but also to make them more visible at a distance when the light was poor or the air filled with dust. But, of course, it is impossible to say in the case of T. VIII how many of the existing coats were applied before or after the quarters were built on to the tower. The topmost coat at the north-east corner of the tower bore the rough outline sketch of a camel, as seen in Fig. 168.

Construction of quarters.

Of these quarters there survived to the north parts of the walls enclosing two rooms, each of which had a length of about 20 feet. The one next to the tower base, i, had a width of 6 feet; the other beyond the outer wall could no longer be traced. At the western end of i there remained a few steps of a staircase, probably once leading up to the roof and giving access thence to the top of the tower. From the eastern end of this room there led a narrow passage, ii, into another small room, about 7 by 8 feet, which may well have been added later, as the heavy wooden posts set into the walls of the passage, and containing sockets for thick wooden door bars, clearly suggested an entrance from outside, not a door between two rooms. The enclosing walls of the quarters were badly broken in most places, but showed a peculiar arrangement of the masonry, the bricks being set on edge with the longer and shorter sides facing outwards in alternate courses, as seen in Fig. 168 on the left.

[3] See above, p. 571.

The fact already mentioned that the débris of the falling tower had crushed at least a portion of the quarters, together with the roofing of reed bundles laid over Toghrak beams, explains why more fittings and implements, left behind after the abandonment of the post, were found at this ruin than at other stations where the deserted quarters had probably lain exposed for many centuries. No place, however, within the quarters had been turned into a dust-bin before they were abandoned, and hence the number of inscribed pieces found here was not great, only about a dozen in all. But several of them are of special interest on account of their local associations or for some other reason. A definite date is furnished by the 'slip' fragment T. VIII. ii. 2, *Doc.*, No. 585 (Plate XVI), which mentions the year corresponding to A. D. 8, and thus agrees with the chronological evidence contained in T. VIII. i. 9, No. 586, which refers to Tun-huang by the name *Tun-tê* 敦德. This was the designation borne by the district at the time of the usurper Wang Mang, A. D. 9–23. The fact that both these dated records were found within the rooms of the post, and are not likely to have been left there a very long time before its abandonment, deserves to be noted. We shall see that none of the documents discovered at stations to the west of the ancient 'Jade Gate', marked by the remains at T. XIV, nor those at T. XIV itself are of a later date than the reign of Wang Mang.[4] This points to the conclusion that the westernmost section of the Limes may have been abandoned not long after that period.

Remains of roofing.

Document of A. D. 8 found at T. VIII.

Two records relating to objects which undoubtedly belonged to this watch-station are curious in themselves, and also claim importance because they give us the name of the detachment entrusted with the guarding of it. The inscribed lid T. VIII. 5, *Doc.*, No. 588 (Plate XVII), was a particularly interesting discovery, the value of which I at once recognized. The obverse of this piece of wood measuring about 6½ by 3½ inches, with its rectangular socket for a clay seal and its string grooves, exactly reproduced the shape and arrangement so familiar to me from the envelopes of the rectangular Kharoṣṭhī tablets of the Niya and Lou-lan Sites. A small rim sunk on the under surface proved that this particular 'envelope' had served to cover not a tablet but a box, and there was the Chinese inscription, written in fine big characters above the socket for the seal, to show that the receptacle, of which only this lid remained, had been 'the medicine case belonging to the Hsien-ming company'.

Inscribed lid of medicine case.

Here we clearly have the true prototype of the wooden envelopes from Niya and Lou-lan, some three centuries older than they are and used where everything else in the way of writing materials was purely and unmistakably Chinese. It confirms, in the strongest possible way, the conjectural opinion which I formed on the strength of my first Niya finds and recorded in *Ancient Khotan*,[5] that the device of those wooden envelopes, with other equally clever arrangements in the form and fastening of the Kharoṣṭhī letters and documents, was originally derived from Chinese models. But, apart from this important evidence concerning the ancient stationery in wood, the lid T. VIII. 5 (found, I may add here, in the débris covering the stairs in room i) is of antiquarian interest as proving that regular medicine cases were already included in the military equipment of troops in Han times.

Chinese origin of sealed wooden envelopes.

Less curious, perhaps, but equally valuable archaeological information is furnished by the wooden label T. VIII. 6, *Doc.*, No. 587 (Plate XVII), which on the obverse is inscribed: 'The *Hsien-ming* company of *Yü-mên*,' and on the reverse: 'Hundred bronze heads for arrows of the Mêng type.' There can be no doubt that the label was meant to be attached to a bag or small box holding this quantity of ancient ammunition provided for the company named, and the presumption is that the guard for the post T. VIII was at the time furnished by the company. The fact that the Hsien-

Ammunition of *Hsien-ming* company.

[4] See below, pp. 688, 694.

[5] Cf. *Ancient Khotan*, i. pp. 361 sq.; also above, p. 382, for similar confirmatory evidence supplied by inscribed wooden lids of the L.A. Site, Lou-lan.

ming company is described as 'of *Yü-mên*' is of interest and agrees with the evidence supplied in a conclusive form by far more abundant documents elsewhere, which proves that the 'Jade Gate' must be looked for on this westernmost portion of the Limes. But it does not help us to determine the exact location of this famous frontier station, which we shall have occasion fully to discuss further on.[6] The fact that the Hsien-ming company, in the only other document where its name occurs, T. XII. 10, *Doc.*, No. 597, is spoken of as 'of *Kuan-chi*' sufficiently warns us against attaching too great importance to such local designations of detachments. They may often indicate only the place where the head quarters were stationed for the time being, and they always require to be carefully considered in the light of other records, and especially of topographical and archaeological evidence. Such evidence, I may add, in this case excludes all idea of the 'Jade Gate' having at any time been at T. VIII. The ground to the south of the wall is here an absolutely barren gravel plateau without water, and hence wholly unsuited for an important head quarters station such as Yü-mên must always have been.

Miscellaneous fittings of quarters.

Of the other inscribed pieces found at T. VIII I need only briefly mention T. VIII. 2, No. 591, which is a large painted board of wood, with an enumeration of various kinds of equipment, including two quivers. All such equipment had been removed long before the tower came to fall and bury the abandoned quarters. Yet the finds of miscellaneous objects left behind as of no use or value were more plentiful here than at the majority of the watch-stations, as a reference to the Descriptive List in Chap. XX will show. The number of painted pieces of wood, T. VIII. 0018, 0022, 0029, &c., evidently fragments of furniture, suggested that some of the fittings of the quarters were still in their place when they were buried by the débris. Painted wooden brackets used as hooks for hanging accoutrements, etc., as already described, and of various types (T. VIII. 004–009, 0030–33, Plate LIV), were numerous here. As they, like most of the larger miscellaneous fragments in wood, were found in room i from 2 to 4 feet above the floor, it may be assumed that they were brought down with the walls to which they were fixed.

The possible use of the wedge-shaped wooden block, inscribed with some large Chinese characters too much effaced for decipherment, T. VIII. 1 (Plate LII), has already been discussed.[7]

Foot and inch measure of Han period.

It, too, had probably been hanging on the wall, just like the interesting wooden measure and 'set square', T. VIII. 4 (Plate LIV), which still retains its suspension string, though broken. Referring to the Descriptive List for a detailed account, I may point out that this measure, resembling in shape a shoemaker's foot-rule, is marked into 10 divisions of an approximately uniform length of $\frac{9}{10}$ inch each, with further subdivisions on the decimal principle. Like the measure T. XI. ii. 13, from a station to be described presently, which is of the same dimensions, it gives us the exact value of the Chinese foot and its ten inches, as in use under the Han dynasty. The interesting instance in which I was able myself to apply the test of this ancient foot-rule to the roll of silk found at the Lou-lan station has been discussed above, and two others connected with strips of silk found on the Limes itself will have to be considered hereafter.[8] Elsewhere, I have also discussed the confirmatory evidence furnished by the great mass of ordinary 'slips' of wood and bamboo recovered from the Limes as well as from the Niya and Lou-lan Sites which, as Chinese tradition clearly tells us, were meant to measure one foot in length, and which in full conformity always show an average length of 9 to $9\frac{1}{2}$ inches.[9]

[6] See below, pp. 689 sqq.

[7] See above, pp. 645, 652.

[8] Cf. above, pp. 373 sq.; below, pp. 701 sqq.

[9] See above, pp. 382, 593, 597; *Ancient Khotan*, i. pp. 358 sq. I may note here in passing that, according to Chinese information collected by Prof. F. Hirth (*T'oung-pao*, 1896, p. 505), the foot of the Chou epoch is supposed to have measured 23·5 centim., or $9\frac{1}{4}$ inches, which is exactly the length proved by my finds for the foot of Han times. According to the same source the foot under the Ch'in and Han is supposed to have measured 17·3 centim. and towards the end of the latter 29·3 centim. M. Chavannes, *Les livres*

Among implements may be mentioned a painted wooden block, T. VIII. 0010 (Plate LII), apparently intended to hold tapers or sticks of incense; a padded block probably meant for grinding paint, T. VIII. 0025 (Plate LIV); and numerous wooden seal-cases, of which the varying types will be found classified and described in the Descriptive List under T. VIII. 5. Two of these types, as illustrated in Plate LIII by specimens from other Limes stations, have the same arrangement of grooves to hold the fastening string as we have seen in the seal sockets on the 'envelopes' of Kharoṣṭhī tablets. That the men stationed on guard had, after the Chinese fashion still to be observed nowadays, employed their leisure in homely occupations was made clear here by a variety of implements. Among them may be classed the wooden apparatus, T. VIII. 001 (Plate LII), roughly made, but in perfect preservation, which according to the information of Tila Bai, my observant Turkī follower, resembles an instrument used about Yārkand for reeling cotton.[10] The numerous slightly curved wooden bars, of which T. VIII. 0026, 0027, are specimens, were provided with holes at regular intervals and may have been used in making ropes or thread. Of homely use, certainly, was the wooden spinning whorl, T. VIII. 0038. The purpose of the curious wooden stick, T. VIII. 0039 (Plate LIII), painted to represent the head and neck of an animal, apparently a snake, remains doubtful. Finds of textile fabrics, T. VIII. 0041–46, were few and mostly of coarse material, including goat's hair and even reed shreds. But the pair of woven string shoes, T. VIII. 002 (Plate LIV), is well made and its technique is of interest. The fact that the resources of civilized life, even if of a humble kind, had to be treasured at these distant posts of the Limes was curiously illustrated by the pieces of a large jar of hard grey pottery found in an outer room on the north. It had been broken, and then patched up again by means of leather thongs passed through holes.

Seal-cases, wooden implements, &c.

Before leaving this desolate watch-station, now about 6 miles away from the nearest water, I may refer to a curious observation made outside it. To the south-west, not far off, I noticed two stumps of wood just emerging from the gravel surface and at about 20 yards distance from each other. On clearing the ground, the end of a stout rope made of reed strands, still about 4 feet long, was found twisted round one of the posts. Though massive enough, measuring fully 6 inches in diameter, they had been worn down by the wind-driven sand and gravel almost to the surface of the soil. It was easy for me, accustomed as I was to see the same practice adopted by my men at our camps on bare desert ground, to realize that the thick rope, once stretched from post to post, was used for tethering the horses and camels of those who were stationed at the place or happened to halt there.

Posts and rope for tethering horses.

Section II.—THE TOWERS T. IX, X AND THE MARSH SECTIONS OF THE LIMES

In the account given in Chapter XIV of my first passage along the westernmost portion of the Limes proper I have already described the stretch of wall which extends unbroken from T. VIII eastwards to T. IX, and also the latter tower itself (Fig. 173).[1] It was certainly the best preserved of all the watch-towers I have seen on the Limes. This may be accounted for partly by its very solid construction, the details of which have been recorded, and partly by its position on a knoll rising above the steep eastern edge of the gravel plateau that is crossed all the way from T. VII. Owing to this position, which is clearly seen in Plate 33, but little of wind-driven sand or fine gravel from the east or north-east could attack the foot of the tower. In consequence erosion had nowhere

Well-preserved watch-tower T. IX.

chinois, p. 18 note, from whom I take the reference, has justly expressed doubt as to the reliability of these latter measurements.

[10] My notes record an exactly corresponding find having been made at T. VI. b.

[1] See above, p. 572.

succeeded in lowering the ground more than about one foot below the original level, as indicated by the lowest brick course (see Fig. 173). The observation is of special interest as confirming by negative evidence a statement that I have already made several times about the peculiar erosive force of the winds blowing from the east and north-east.

Outlying watch-station T. IX. a.

The tower T. IX, placed as it was on a knoll rising some 60 feet above the gravel plateau, commanded a complete view to the west and over the sandy scrub-covered depression eastwards. But it was far less favourably situated for watching the ground to the north and a deeply sunk Nullah which extends from T. IX to the north-west. This area could not be effectively observed from the posts T. VIII and T. IX, as it was screened by a series of very steep clay terraces which, rising in this part of the depression, might have allowed raiding parties to approach the line of the wall unperceived. It was, no doubt, this tactical feature of the ground, indicated by the map in Plate 33, which induced the designers of the Limes to protect this weak point in their line by the outlying watch-station T. IX. a, placed to the north of the Nullah just mentioned and about 2½ miles from T. VIII. Whether owing to the atmospheric conditions prevailing or from the peculiar lie of the ground, both the Surveyor and myself had on successive occasions failed to notice the tower T. IX. a, until it was sighted on April 30, as we proceeded south-west of T. IX over the gently rising Sai.

Features of T. IX. a and enclosure.

Subsequently, on my return from the south-west flank of the Limes, I was able to visit this tower and convinced myself that it represented a picket thrown out beyond the line for its better protection. The tower rose on a low plateau tongue to a height of about 20 feet. It measured 18 feet square at the base and was built with bricks, 18 by 9 inches and 4½ inches thick. Just as at T. IX, the sun-dried bricks were fairly hard, though containing no straw. After every 5 courses a thin layer of reeds was inserted. There were scanty traces of brick walls, of small rooms adjoining the tower on the north and east, and also of steps once leading up along its north face. But there was very little débris and no refuse of any sort, which explains the absence of 'finds'. It seems probable that this post was occupied only occasionally and for short periods when raids were expected. Its isolated position accounts for the additional defence provided in the shape of an enclosure round the tower, forming roughly a square of 34 yards. The rampart of clay and gravel of which it consisted had decayed to a height of 4 or 5 feet only, and in places had become completely effaced. No other towers could be sighted to the north or west, though Rai Rām Singh also had approached the ground closely on a reconnaissance north of the Su-lo Ho, and this prevents any conjecture that a line of posts had been pushed out further on this side.

Post occupied for short periods.

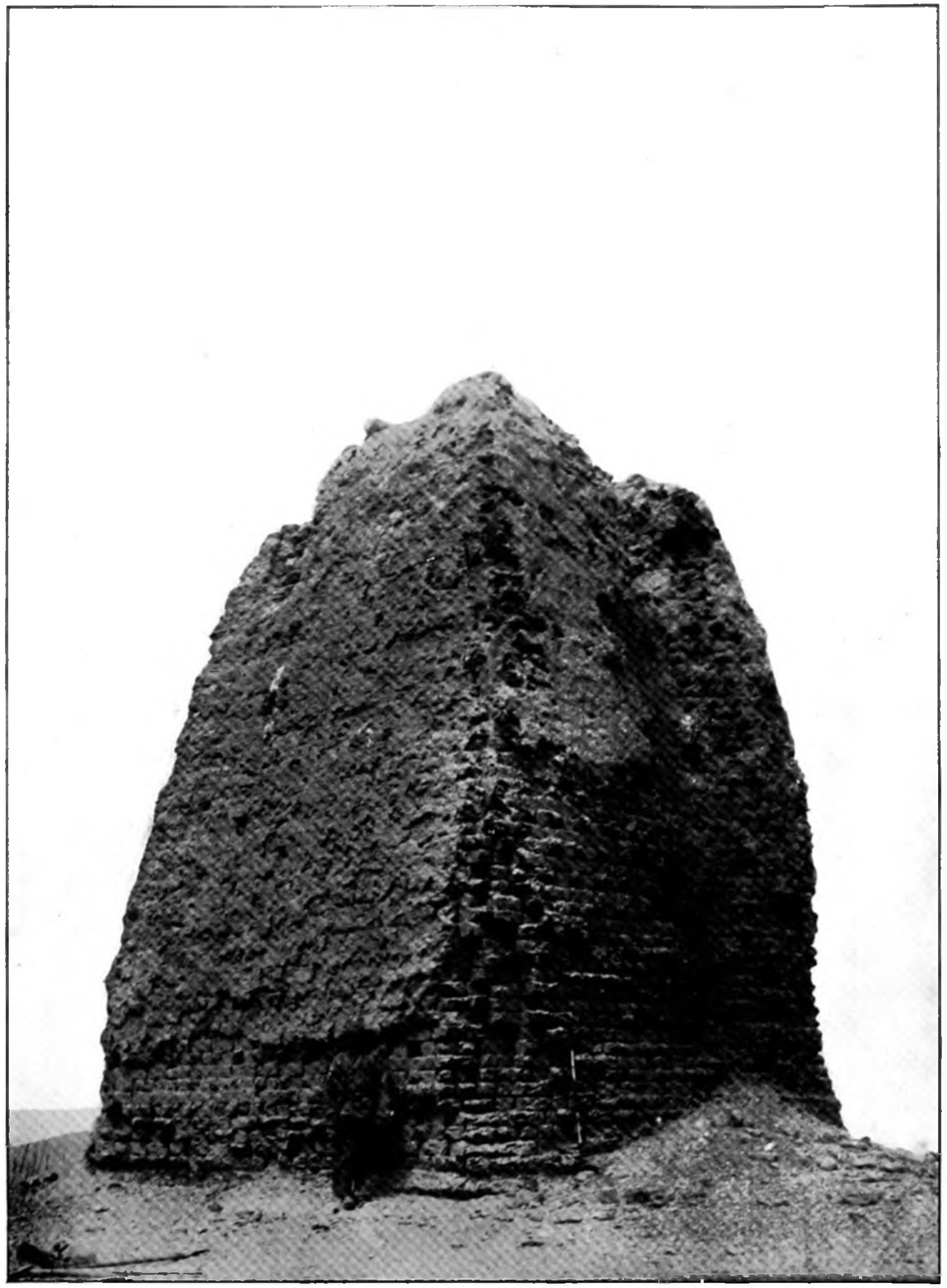
Limes wall traced past T. X.

The stretch of wall running from T. IX across the broad scrub-covered depression to the north-east has been followed by us already in Chapter XIV.[2] Neither it nor the curiously truncated watch-tower T. X (Fig. 174), with its salt-permeated layers of clay, needs any further description. But I may add that, as this heavy salt impregnation of the clay clearly proves, the small stream crossed half a mile further on was in ancient times as salt as it now is; for there, no doubt, the water for the pisé was obtained, while the clay itself must have come from the ridge, at the northern end of which this conspicuously placed tower rises. Except for a short break at this salty streamlet which comes from springs further south, the line of the wall with its layers of reeds could be traced from T. X right up to the salt-encrusted southern shore of the small lake which is shown by the map north of Camp 155.

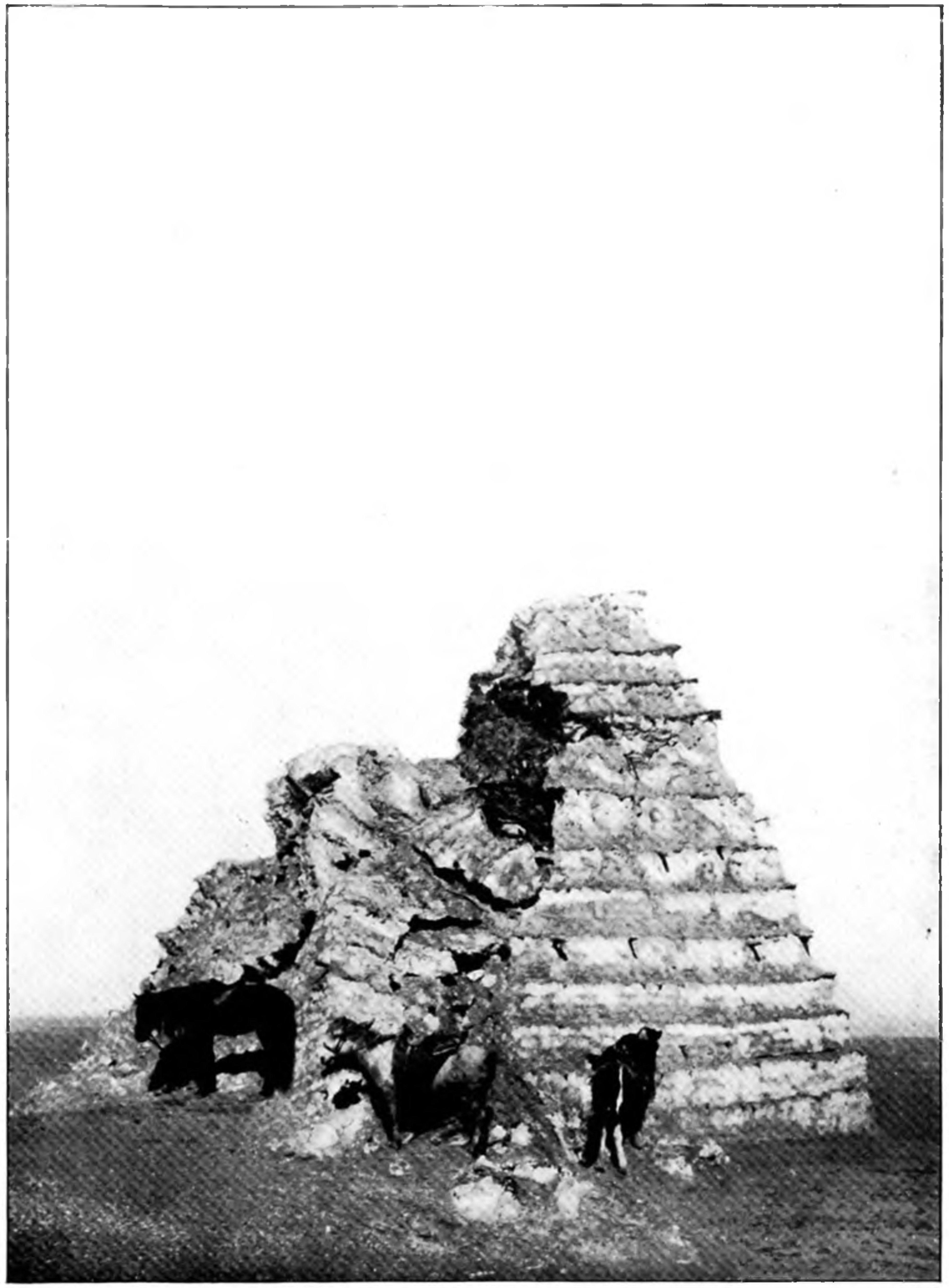
Limes line along marshes.

It is at this point that the Limes, coming from its western termination, first enters a topographically very interesting and well-defined portion of its line, which extends eastwards as far as

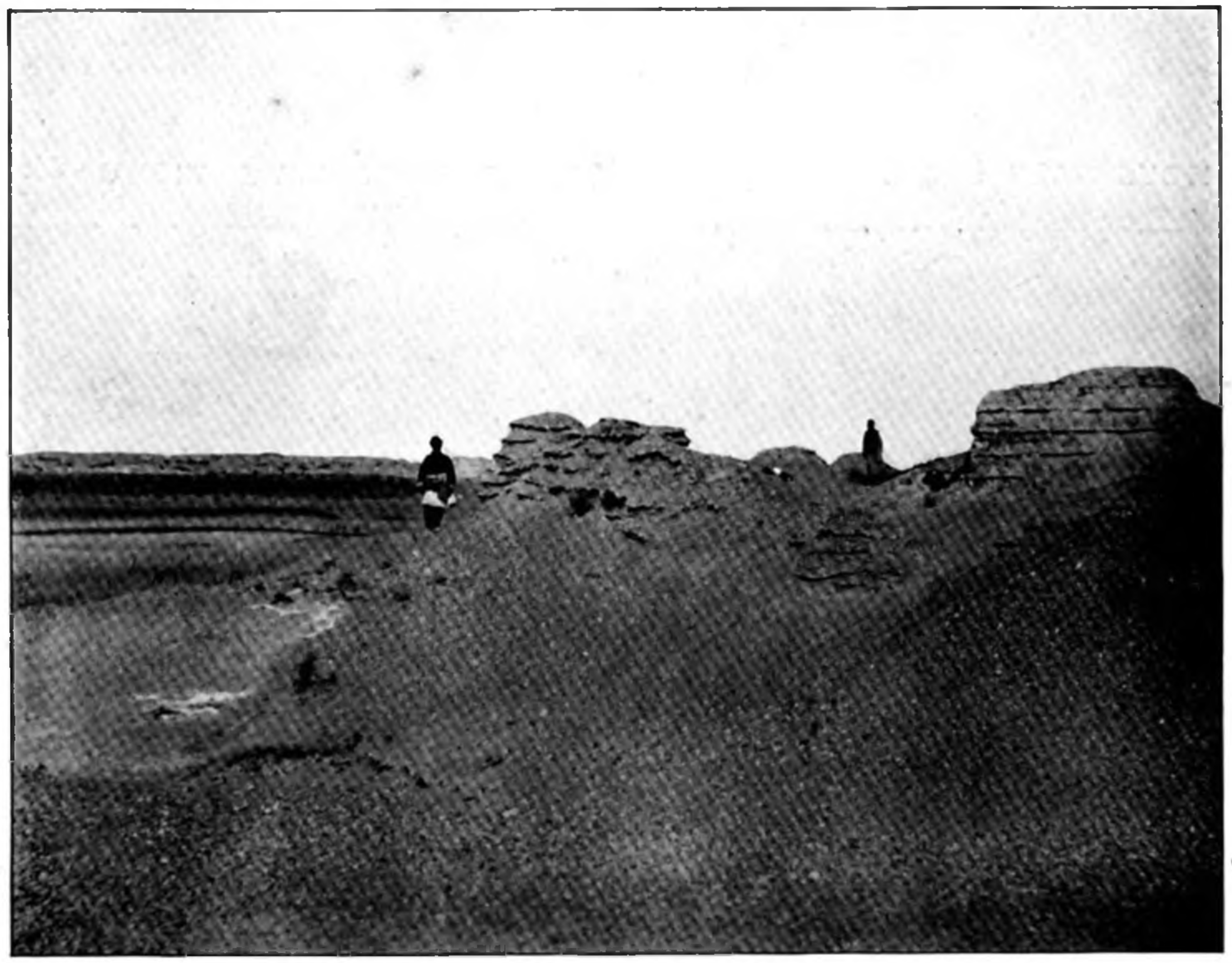
[2] See above, p. 572.



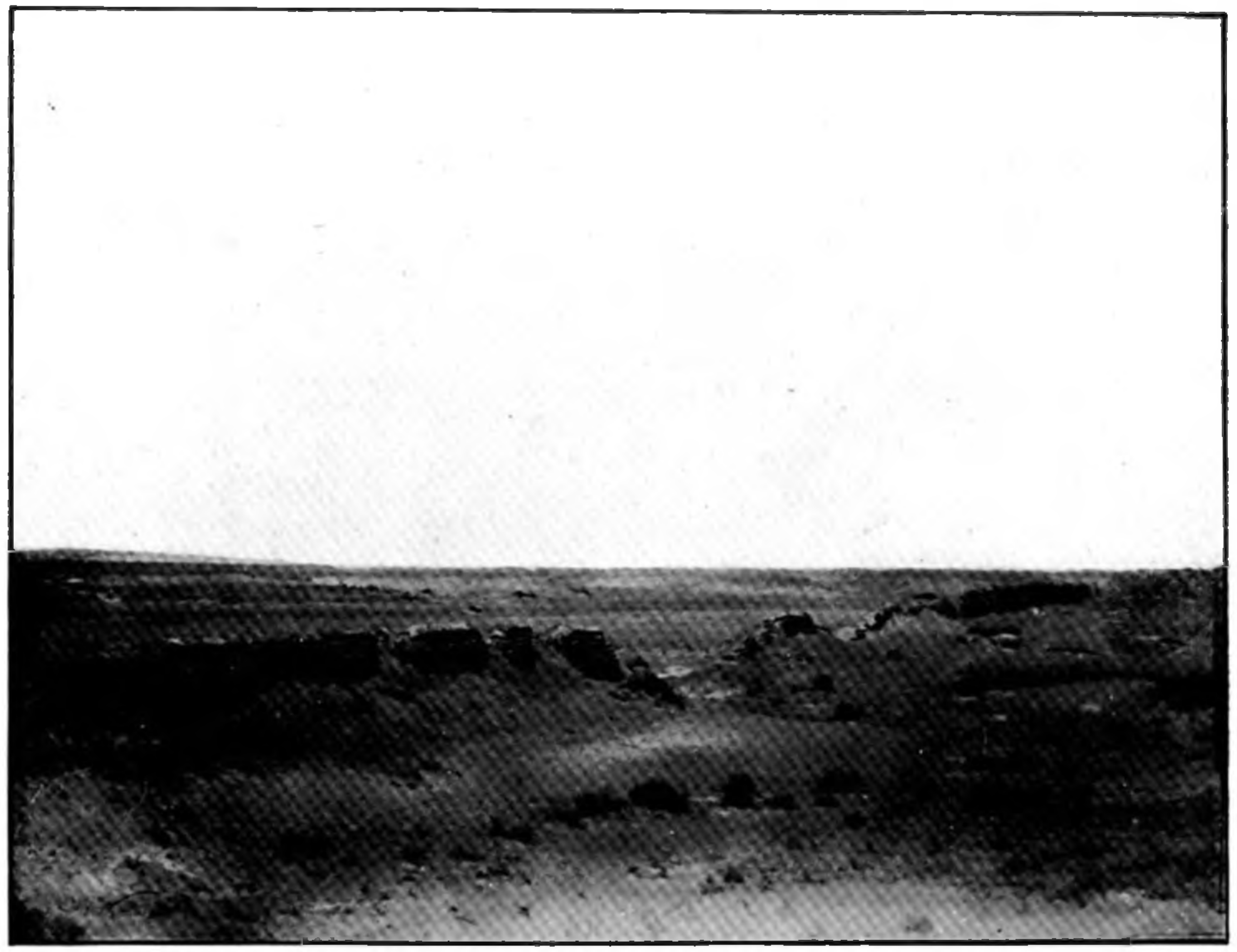
173. ANCIENT WATCH-TOWER T. IX, TUN-HUANG LIMES, SEEN FROM NORTH-WEST.



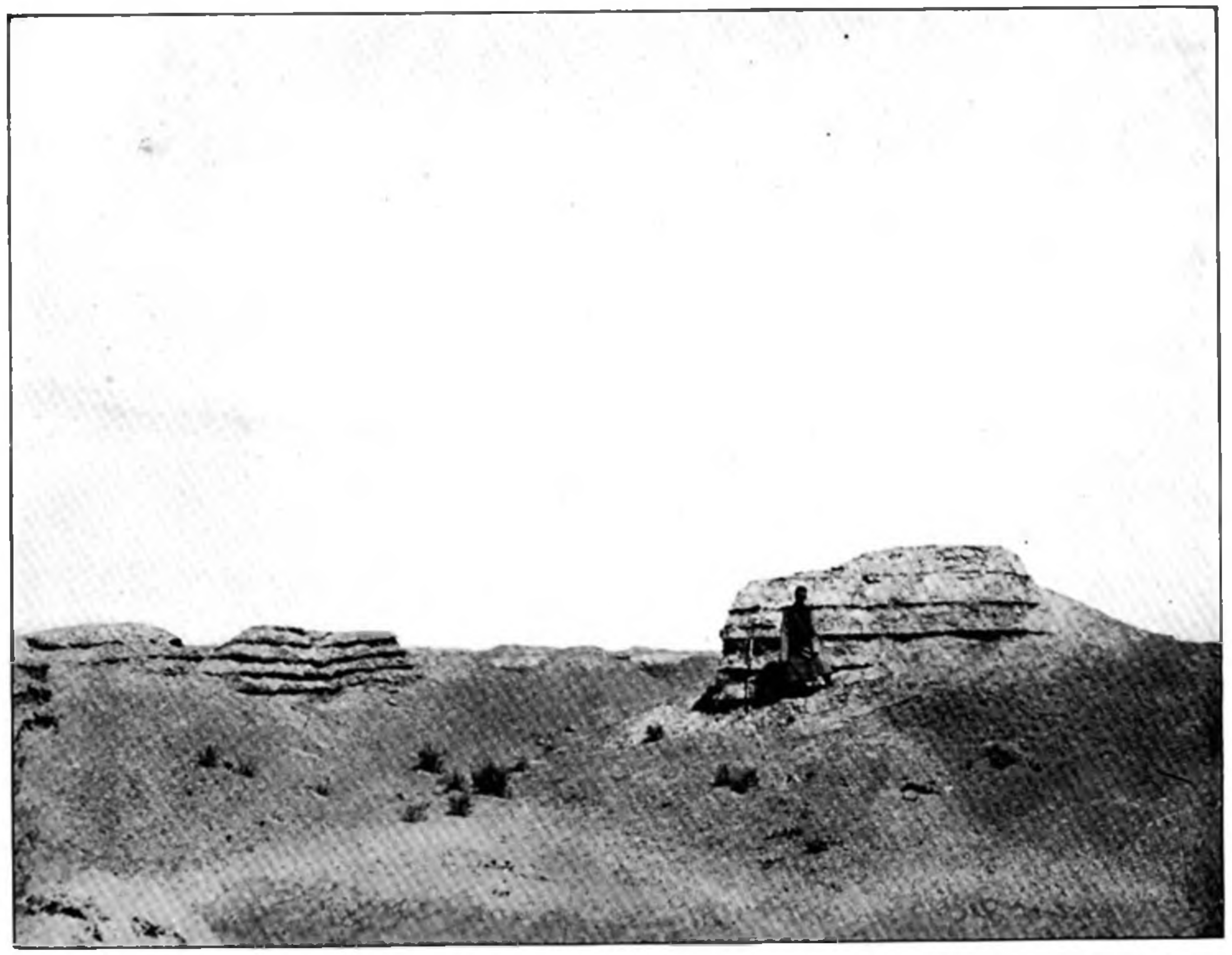
174. RUINED WATCH-TOWER T. X, TUN-HUANG LIMES, SEEN FROM SOUTH-EAST.



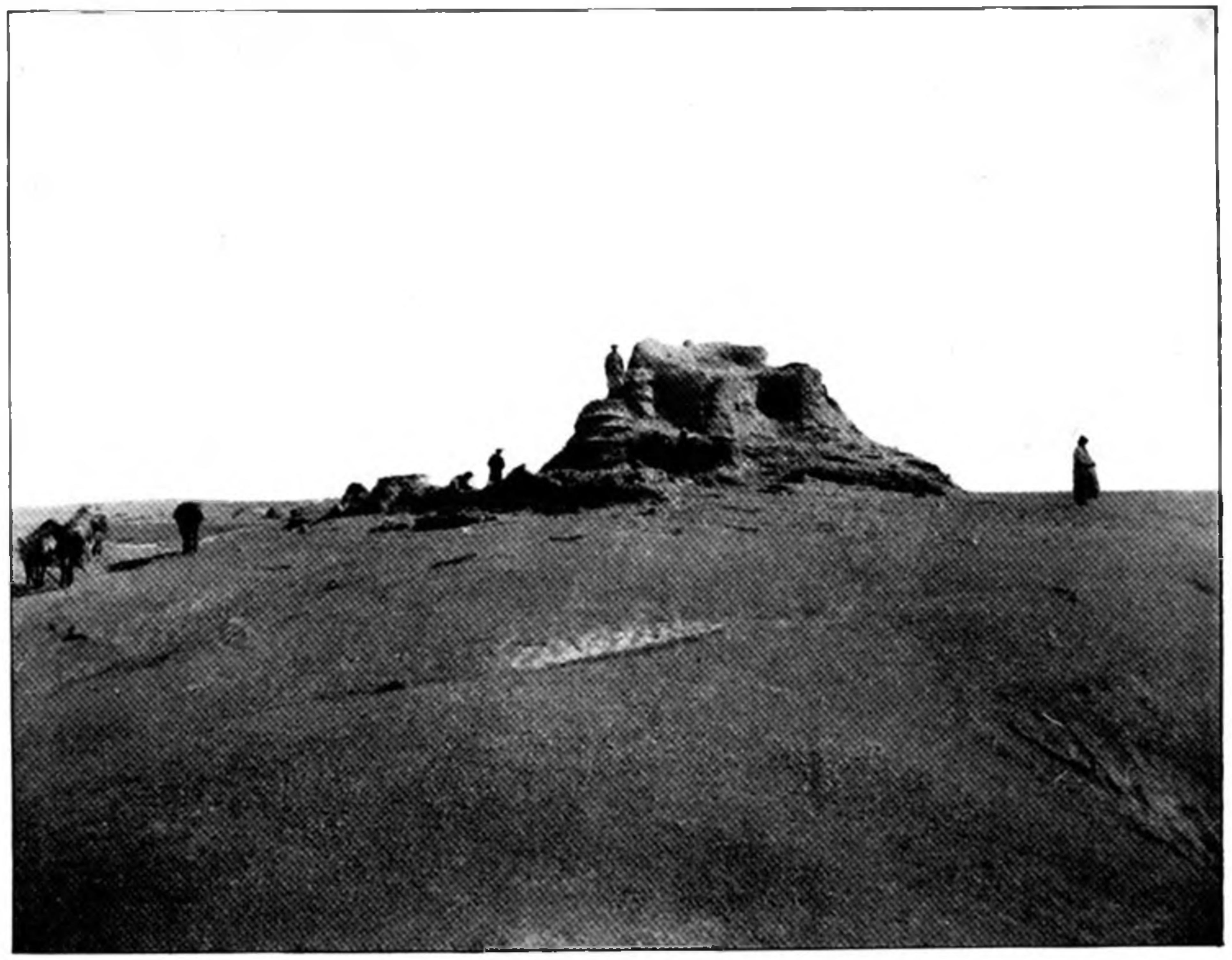
175. REMAINS OF ANCIENT WATCH-TOWER T. XII. a WITH BORDER WALL, TUN-HUANG LIMES, SEEN FROM NORTH.



176. LINE OF ANCIENT BORDER WALL, STRETCHING EAST OF WATCH-TOWER T. XIII, TUN-HUANG LIMES.



177. RUINED WATCH-TOWER T. XII. a TUN-HUANG LIMES, SEEN FROM NORTH-WEST



178. ANCIENT WATCH-TOWER T. XI, TUN-HUANG LIMES, WITH ADJOINING ENCLOSURE, SEEN FROM SOUTH-WEST.

the Khara-nōr lake. The defensive border line has been carried here across a succession of marshes and small lakes which fill the ends of depressions running from the south towards the Su-lo Ho; further on it skirts the wide lagoons and marshes into which the Su-lo Ho expands after leaving the Khara-nōr, as well as this larger lake itself. The first-named section may be described as reaching from the lake near T. x to T. XVII; the second may be said to extend thence to near the eastern end of Khara-nōr, marked by T. XXIII. b.

Natural defences of Limes line.

There can be no possible doubt, after the close survey I was able to effect both of the line of the Limes and of the ground over which it had been carried here, that this alignment of the wall and watch-stations was chosen with set purpose and much care by the old Chinese engineers in order to supplement their line by natural defences, and thus to save labour of construction as well as effort in its guarding. It is fortunate, and at the same time significant, that we find a distinct reference to this point in the important document from T. VI. b, *Doc.*, No. 60, already mentioned,[3] which has preserved for us some record of an imperial edict directing the establishment of a military colony, evidently in the territory of Tun-huang. It clearly enjoins the governor of Chiu-ch'üan or Su-chou entrusted with the execution of the edict, 'to examine the configuration of the places. Utilizing natural obstacles, a rampart is to be constructed in order to exercise control at a distance'.

Limes adapted to configuration of ground.

Of the careful adaptation here prescribed of the line of the Limes to the configuration of the ground and of the intelligent use of natural obstacles to strengthen or replace it I could not wish to find more striking illustrations than those provided by the remains of the wall and watch-stations along the sections of the Limes mentioned above. But as soon as I began their exploration from the lake near T. x, I found my task complicated to no small extent by peculiar topographical features. Seeing how closely the Limes itself, and consequently also my archaeological labours concerning it, have been affected by the local topography, it will be convenient briefly to explain its general characteristics before I describe in detail the observations and finds connected with individual stations.

Gravel plateaus and marsh-filled depressions.

Some time before, when I first followed the route from Lop to Tun-huang, I had noticed lakes and marshes north of it in the depressions which are frequently passed from this point onwards. But only when I set out on the preliminary reconnaissances here particularly necessary, and proceeded to visit each ruined tower I had seen before rising far away to the north over what then had looked a uniform dead level of gravel desert, did it become clear how broken the ground was over which the border line of wall and posts had been drawn. What had seemed a flat plain, extending to the gravel glacis of the bare and lifeless hill chain of the easternmost Kuruk-tāgh, now proved to be in reality a succession of low and somewhat narrow gravel-covered plateaus separated by winding depressions. A reference to the map in Plate 33 will help to illustrate this intricate configuration of the ground. It resembled a strongly developed coast-line, with flat tongues of land left between a complex system of bays and inlets. They all distinctly recalled the 'coast-line' of the great marshy basin on the south-west flank of the Limes, though the features observed there had been of a somewhat simpler type and the differences of level more marked. Just as there, it was easy to see that the depressions, ordinarily running from south-east to north-west, had been originally produced by the erosive action of the drainage descending from the foot of the mountains south of Nan-hu, which in earlier periods was obviously far more abundant than now.

The marshes which now fill great portions of these depressions, and chiefly those lying to the north of the caravan route, are fed by springs receiving subsoil drainage from the glacis of the

[3] See above, p. 647.

Marshes and reed-beds in depressions.

mountains on the south. The larger sheets of open water to be found within the marshes extended, at the time of my visit, up to $1\frac{1}{2}$ miles in length, and all were fringed by dense reed-beds. Salt-covered bogs stretched further away in the line of the drainage north-westwards and showed signs of being liable to periodical inundations. To what extent, if any, these might be caused by overflow from the Su-lo Ho bed, or by percolation from the marshes and lakes which further to the east, from the vicinity of T. xvii onwards, are certainly fed by the river, I could not investigate with sufficient closeness. In some other parts of these depressions, mainly near the Lop route and to the south of it, all trace of water had disappeared from the surface, but the growth of tamarisk bushes, with other hardy scrub and thin reed-beds, showed that here also subsoil water was near it.

Wall guards ground between marshes.

The marshes and salt-encrusted bogs were found quite impassable for horses or camels, and in most places for men, too. Generally detours of miles were needed to take me from one tower to another round the edges of the marshes or over strips of less treacherous ground. The remains of the towers, owing to the commanding position they invariably occupied, proved most helpful in guiding me from a distance. But, after the swamps had been passed, I still had to search for the remains of the ancient wall. Along the section extending from T. x to T. xvii, a total distance of nearly 18 miles on the line of watch-stations, the wall had been carried unfailingly over every bit of firm ground capable of offering a passage for the enemy's inroads, and right down to the edge of the marshy inlets. Across their bottoms the lakes and bogs necessarily took the place of the wall, providing a natural defence and thus saving the labour of construction over a considerable number of miles. How important this gain was can easily be appreciated if we take into account the huge difficulties of supplies and transport which must have attended the maintenance of adequate labour for building the wall in absolute desert and often at great distances from drinkable water.

'Wet border' towards Khara-nōr.

The gain resulting from this use of the great natural obstacle offered by impassable marsh must have been even greater along the eastern section of the line here under consideration, which extends from T. xvii to the west shore of the Khara-nōr near T. xxii. c, and is of about the same length as the other. Along the greater part of this section the belt of marginal lagoons and marshes formed by the Su-lo Ho is so wide that the construction of a wall along its southern edge appears to have been thought unnecessary. In any case, it is only on two short stretches of this portion of the line, marked by the towers T. xix–xx and T. xxii. b, c, that I was able to trace remains of the ancient *agger*, and as both these stretches are found just where the Su-lo Ho happens to flow in a well-defined narrow channel between firm banks, the exception here may well be held, as it were, to confirm the rule.

Difficulty of tracing wall over soft soil.

I must add, however, that where the soil was soft and scrub-covered, as it was near the marshes, the eye sometimes failed at first to discover the traces of the *agger*; for the remains of the rampart constructed, here as elsewhere, with alternate layers of earth and fascines had on such ground suffered particularly marked decay through the moisture rising from below. The coarse but abundant vegetation, which finds nourishment in this salt-permeated soil, necessarily also helps to obscure any remains that may survive. It was, of course, different on the gravel plateaus of the section further west, from T. x to T. xvii, and there ordinarily it did not take long, after once their edges were gained, to discover the familiar track of the wall running straight in the direction of the nearest watch-station.

Wall as gauge for ancient water-level.

A general observation of distinct geographical interest, which was obtained from what I may call the two marsh sections of the Limes, may also conveniently find brief mention here. It had occurred to me from the beginning of my explorations on the Limes that the line of its wall, drawn

right across the gravel plateaus and the depressions which break it, might supply us with something like a reliable historical gauge as to the changes which may have taken place in the water-level of the marshes during the last two thousand years. It is obvious that any trustworthy data obtained in this respect would have an important bearing upon the questions concerning climatic changes in this region that are traceable within the historical period, and particularly upon that much-debated question of 'desiccation'. Accordingly, I took special care along this portion of the line to ascertain the difference in level between the actual edge of the lakes or marshes at the time of my visits and the lowest point to which the wall of the Limes could still be traced where it abuts on their shores.

These observations were not always easy to make, and their use calls for critical caution. In the first place, regard must be paid to the varying conditions of the ground. In some parts they would allow the remains of the wall, or rather of the earth mound (*agger*), to which it had necessarily decayed where it was exposed to subsoil moisture, to survive much nearer to the marshes than in others, this variation being dependent on the nature of the soil, the amount of vegetation, and the like. Until exact measurements spread over several successive years are obtained, it is impossible to make sure of the seasonal oscillations to which the level of the marshes fed by springs and of those representing marginal lagoons of the Su-lo Ho may be subject. And even then the possibility must always be remembered that periods of higher water-level, of which we have no record, may have intervened between the time of construction and the present, and thus brought about the complete destruction of the wall on shores where we now should be tempted wrongly to attribute the cessation of its remains at a level well above the present edge of the marsh or lake to desiccation pure and simple.

Observations regarding marsh levels.

Making due allowance for such and other uncertainties and limitations, there is yet important evidence to be found among the observations thus gathered. For the whole of the measurements taken on the shores of all the different lakes and marshes which the line of the wall crossed or abutted on, I must refer to the detailed description of the several segments of the Limes.[4] Here it will suffice to note the interesting fact that both on the westernmost spring-fed lake, near T. x, and on the large lagoon, near T. xx, which the Su-lo Ho enters some 10 miles below its debouchure from the Khara-nōr, the observed difference between the water edge and the traceable end of the wall only amounted to about 5 feet. It is well to remember that this difference, slight as it is, represents the maximum of the fall which can possibly have taken place in the level of the two sheets of water between *circ.* 100 B.C. and A.D. 1907; for at both places some little distance intervenes between the actually traceable end of the wall and the shore (about 25 yards at T. x and some 80 yards at T. xx), and as this gently sloping ground was naturally liable to be affected by moisture, it is likely enough that the wall continued originally nearer to the present line of the shore and thus reached down to an even lower level.

Maximum fall of water-level at T. x and T. xx.

It is true that at the other points where corresponding observations were possible, near T. XI, XII. a, XIII (eastwards), XIV. a, XXII. c, the differences of level, varying from 12 to about 20 feet, were greater. But in all these places the intervening ground, where the wall might well have decayed completely, was either considerably wider or else so thickly covered with reeds or other vegetation as to make it impossible to determine whether the actual remains of the wall did not extend further down. Hence the observations there made cannot invalidate the very definite evidence which the above recorded measurements from T. x and T. xx furnish as to the slight extent of the drying-up process in these marshes during the last 2,000 years.

Levels at other points of Limes.

It is of interest to note that this conclusion is in full accord with what general archaeological

[4] Cf. below, pp. 667, 669, 682, 697, 718 sq.

Absence of marked climatic change.

facts prove as regards the improbability of any marked climatic change having taken place on this border between the construction of the ancient Chinese Limes and the present day. The climate in the desert region of the westernmost Su-lo Ho basin must have been exceptionally arid in Han times and must have remained the same ever since, as it has allowed such perishable remains as documents on thin slips of wood, bits of fabrics, etc., to say nothing of mere reed straw, dung, and other unsavoury contents of the rubbish-heap, to survive in practically perfect condition, even when covered up only by a few inches of gravel, as I found them at T. vi. b and in more than one refuse layer elsewhere. Had this ground been liable to be visited annually even by a very few heavy showers during the years while the refuse lay practically exposed on the surface of the gravel slopes below the watch-stations, such relics could certainly not have survived in so remarkable a state of preservation for twenty centuries more.[5]

Precipitation on Nan-shan determines marsh levels.

The level of the lakes and marshes here discussed must, no doubt, depend directly or indirectly upon the amount of rain and snow annually deposited on the high mountains to the south and south-east, which enclose the drainage area of the Su-lo Ho basin. In the present state of our knowledge it is impossible to make any definite assertion as to the connexion between climatic conditions of the Su-lo Ho basin and the amount of precipitation received by the high ranges overlooking it. Yet it is certainly noteworthy that the conclusions to be drawn from the available archaeological evidence agree in the case of both factors, and this agreement seems to me to justify the presumption that neither in the desert portion of the basin nor in the mountains which supply its drainage has desiccation perceptibly changed conditions during the last 2,000 years.

Section III.—THE RUINED WATCH-STATIONS T. xi AND T. xii. a

Position of watch-tower T. xi.

We may now return to the westernmost of the small lakes which the Limes crosses and describe the remains of the latter from where its wall starts again eastwards. It would have been difficult to determine this point or, in fact, to trace the wall at all here but for the ruined watch-tower T. xi (Fig. 178), which occupies a conspicuous position a little over half a mile from the easternmost edge of the lake. It stands, as the map in Plate 33 shows, on a small knoll rising above the narrow southern end of a steep gravel-covered plateau which skirts the lake from the north-east and divides it from a wider marsh-filled depression eastwards. Placed as it is in a detached position about 100 feet above the reed-covered ground close to the marshes, it completely overlooks them for a considerable distance as well as the route which winds round the foot of the plateau. The nearness of comparatively fresh springs must have been an additional advantage to the watch-station placed here.

Limes wall near T. xi.

Immediately to the north of T. xi the top of the plateau, everywhere much worn by the action of water and here less than half a mile wide, is cut across by two small ravines. These start from the depressions on either side and, nearly meeting in the middle, form a kind of natural fosse for the wall of the Limes. This ran along a narrow ridge at about 40 yards distance from T. xi. Its remains stretched there over fairly level ground for only about 30 yards and then descended steeply on either side. Westwards, the layers of reed fascines which marked the line of the wall could be traced for nearly half a mile, ending in a thicket of Toghraks and tamarisks about

[5] In support of this statement, though it is convincing enough by itself, I may refer to the negative evidence afforded by the observations I made at certain sites in the Seistān desert. There, at the watch-stations of an ancient border line, curiously recalling the Tun-huang Limes but constructed on a far smaller scale, I found the refuse-heaps decayed into mere odorous layers of earth. Yet the rainfall of Seistān, according to careful observations now extending over a fair number of years, amounts only to about 2 inches per annum; cf. my *Third Journey of Exploration*, *Geogr. Journal*, xlviii. p. 222.

20 feet above the level of the lake. On the east, where marshy ground was much nearer, the wall was traceable down the gravel slope to a point where the last swelling indicative of its line disappeared on soft soil, about 150 yards from the edge of the marsh and on a level about 10 feet higher.

Features of tower and adjoining quarters.

The ruined tower was badly decayed, as seen in Fig. 178, and as its construction was rough, resembling that of T. x, the original dimensions could not be determined with certainty. It still stood to a height of about 16 feet, and its base seemed to have measured about 24 feet. The building material used consisted of hard lumps of salt-impregnated clay, stamped into layers about 2 feet thick, which thin strata of reeds separated. On the top were found remains of what looked like broken walls, enclosing a small conning-place or guard-room. On the west, close to the base of the tower, was a small room about 21 by 12 feet, built with very rough walls of clay, of which only the foundations survived under the débris and these so imperfectly that no accurate measurements were possible. To the north, north-east, and west I could recognize the remains of an enclosing wall, partly visible on the left in Fig. 178, which might have been approximately circular, with a diameter of about 75 feet. On the south and south-east it had entirely disappeared. This wall was very roughly built with lumps of salty clay and strengthened by the insertion of vertically placed reed fascines, now almost petrified. It still stood in places to a height of 2 or 3 feet, but, as it was only from 1 to $1\frac{1}{2}$ feet in thickness, it was clearly not intended for defence, but merely as a shelter from the winds which in this exposed position would make themselves particularly felt.

Later occupation of ruin.

My impression was that this enclosure was of later date. The abundance of fragments of Chinese porcelain, painted in blue, which lay scattered on the surface within it, and of which T. XI. 001–4, 008–11 are specimens, certainly showed that the place must have continued to be used for shelter by travellers or herdsmen down to Sung times at least, if not later also. This is fully accounted for by the convenience of the ruin as a halting-place. Its position is near springs and grazing, and yet well raised above the vegetation belt of these marshes, where the pest of mosquitoes and insects of all sorts in the spring and summer makes a stay most trying, for men and beasts alike, whenever the winds' force decreases. But if I could have entertained any doubt as to the antiquity of the tower itself, it would have been quickly dispelled as soon as the plentiful rubbish-heaps I had noticed on my first passage came to be dug up and searched two months later. While the excavation of the room above mentioned yielded no find whatever, a considerable number of Chinese records on wood, together with some other relics of the Han period, came to light from the thick layers of refuse.

Chinese records from refuse of T. XI.

In one of these, marked i, close to the south-west of the tower, was found the completely preserved slip, *Doc.* No. 682 (Plate XIX), which furnishes a list of the arms and equipment issued to a certain soldier. Among the dozen records, some intact, found in another layer, ii, extending down the slope on the same side, there are three claiming special mention here. T. XI. ii. 6, *Doc.* No. 680 (Plate XIX), written on a bamboo slip, contains a portion of a calendar relating to a cyclical year which M. Chavannes believes to correspond probably to the year A. D. 153. He bases this dating on the chronological indication furnished by another document from the same rubbish-heap, T. XI. ii. 8, *Doc.* No. 8 (Plate II), which contains what M. Chavannes considers to be probably a supplement to the well-known Chinese lexicographical work, the *Chi chiu chang*, composed between 48–33 B. C., and mentioned above.[1] If this deduction is correct, we must consider the former document as the latest among the datable records on wood which I recovered from the portion of the Limes explored in 1907.

Calendar fragment of A. D. 153 (?).

[1] Cf. above, p. 647; also below, chap. xx. sec. vi; Chavannes, *Documents*, p. 10.

Prolonged occupation of T. xi.

There is no archaeological reason to be urged against this dating, though obviously it must remain conjectural for the present. It is true that, as we shall see further on, none of the definitely dated records from the watch-stations west of T. xiv, the locality of the ancient 'Jade Gate', come down later than the period of Wang Mang (A. D. 9–23), and this fact seems to favour a presumption that the guarding of the westernmost portion of the Limes wall was abandoned at a time not far distant from that reign. But, on the other hand, there can be no doubt that the route to Lou-lan and the Lop region always passed close to T. xi, just as it does now, and it seems to me on topographical grounds very probable that this station, being the last where drinkable water was obtainable on the way westwards until the vicinity of T. iv. b or of Toghrak-bulak was reached, may have continued to be occupied, at least occasionally, long after the regular guarding of the wall west of T. xiv had ceased. We shall have occasion presently to consider evidence pointing to the same conclusion in respect of T. xii. a.

Mention of *Kuan-chi* and *Tang-ku* company.

A third record from the same refuse-heap, T. xi. ii. 1, *Doc.* No. 681, is of interest because it names a certain 'indigenous functionary' of *Kuan-chi* and 'the captain of the *Tang-ku* company'. The fact that *Kuan-chi* is twice mentioned in records found at T. xii. a strongly suggests that the locality meant must be looked for on this section of the Limes, perhaps at T. xii. a itself and the closely adjoining station of T. xii. We are led towards the same conclusion by the name of the *Tang-ku* company, which is otherwise found only in a document from T. xiii, the next station eastwards. In this record, T. xiii. i. 3, *Doc.* No. 401, it is spoken of as 'the *Tang-ku* company of *Yü-mên*', and what I shall be able to show further on as to the identity of Yü-mên, or the 'Jade Gate', with T. xiv explains why we may expect to find references to a company having its head-quarters there among the documents of stations that lay only some three and eight miles respectively westwards.

Han foot and inch measure from T. xi.

Chinese records on wood were also recovered from the refuse-heaps iii and iv, which were found on the slopes of the knoll to the south and north-west of T. xi; but none of them call for special notice here. Among the miscellaneous relics from the several refuse layers of this station it will suffice to mention T. xi. ii. 13, a foot-measure carefully made out of a slip of cane and excellently preserved. In exact conformity with the above-discussed foot-rule T. viii. 4, it has ten divisions, each measuring $\frac{9}{10}$ of an inch, and thus conclusively proves that the foot of the Han period was equivalent to 9 inches.[2] For an explanation of some half-petrified stacks of reed fascines found to the north of the tower I must refer to the last section of this chapter. Owing to the very confined nature of the ground they were placed on the narrow ridge along which the wall was carried, three of them being within, and four others outside, its line.

Marshy depression east of T. xi.

The marsh which extends with open sheets of water on the east of the plateau bearing T. xi could not be crossed until I moved more than a mile northward, where the surface of the depression turns into a partially dried-up salt bog. Passing this with some difficulty, I reached firm ground again at the northern end of a small island-like plateau, about a mile long and less than half a mile across.[3] On this little plateau I failed to trace any remains of the wall, though it fell into the same line. In all probability there was no need for a protecting wall here, since the plateau is isolated on the west, south, and east by deep and quite impassable marshes. From the north, too, it can be approached only over boggy ground which, if the water-level in Han times was but a couple of feet higher than at present, would have been equally impracticable then. As it was, I had to make a not inconsiderable detour to the north before the depression on the east, holding deep water and morass, could be crossed to the long and narrow plateau on which the towers T. xii. a and T. xii stand.

[2] See above, pp. 374, 660; also below, pp. 672, 701.

[3] The configuration of the ground is correctly shown in Map No. 74. D. 3. In Pl. 33, by an error of the draughtsman which escaped attention, the marsh to the west of the isolated plateau is represented as wider than the one to the east of it, whereas the opposite holds good.

Skirting the western edge of this plateau tongue I came upon the remains of the wall again running from the edge of the marsh towards T. XII. a, in the direction of ENE. The wall was traceable to within about 30 yards of the actual water line, where its remains disappeared in thick reed beds, on a level about 10 feet higher than that of the marsh at the time. The wall, built in the usual fashion, ran in an unbroken line, and in places still not less than 6 feet in height, as far as the ruined tower T. XII. a (Fig. 177). There it made a sharp turn to the south-east and descended over the steep slope of the plateau to the edge of the deep swamp which fills the depression eastwards and is visible on the left of Fig. 175. This stretch of wall beyond T. XII. a could be traced till, after about 80 yards, it disappeared among the reeds fringing the swamp. The total distance covered by its length from one marsh to the other was a little under half a mile. **Limes wall near T. XII. a.**

The tower of T. XII. a was badly decayed, rising only to about 8 feet from the level of the ground. Its base, as the subsequent clearing proved, was about 23 feet square (see plan in Plate 39). It was built of sun-dried bricks, measuring about 17 by 8 inches, with a thickness of 5 inches; after every three courses a layer of reeds was inserted. Heavy débris found on the east and south sides showed where portions of the superstructure had fallen, and Toghrak branches and bundles of reeds, sticking out underneath on the east side, indicated that remains of quarters lay buried here. Mere scraping with the heel of my boot, on the occasion of my first reconnaissance visit, sufficed to unearth here from the foot of the débris the curious little tablet, T. XII. a. I, *Doc.* No. 606 (Plate XVIII), 4 inches square, with a boldly inscribed direction about 'two guards to be placed at each door'. Subsequent excavation on the east side of the tower brought to light a considerable quantity of fragments (T. XII. a. 001–41; i. 001–6), mainly from wooden fittings, household implements, clothing, etc.; besides eight Chinese records on wood. Owing to the heavy mass of masonry which had fallen from the tower the thin walls of the quarters had been badly crushed, but two small rooms, 12 feet wide, could still be distinguished. Most of the miscellaneous relics found here were of types already mentioned. Among such, e.g., were the carved brackets for hanging clothes, etc., T. XII. a. 001–3, and wooden seal cases, 005–11, 0015–18. For specimens of these as well as some others, among which are the little bow, T. XII. a. 0024, and the curious carved wooden finial, 0025, see Plates LIII, LIV. **Watch-tower T. XII. a.** **Miscellaneous finds in quarters.**

In consequence of the heavy earth-work the clearing of the débris adjoining the south foot of the tower had to be left for a second day's work under the joint care of Naik Rām Singh and Chiang Ssŭ-yeh, while I myself was kept away, busy with prospecting the remains to the north and north-east of T. XIV. It was then that the most interesting finds at this station were made. Immediately against the south face of the tower was a space about 4 feet wide, which seemed to have been filled up on purpose with broken bricks and loose earth. Next to this came a still narrower passage (marked ii in plan), only 1′ 10″ wide, enclosed between walls of single bricks and divided by an equally thin partition into two little compartments, each about 11 feet in length. A thick layer of straw and stable refuse covered this passage as well as a little room, measuring only 5 by 6 feet, which adjoined it and the south-west corner of the tower. The passage, as I convinced myself by subsequent inspection, had its walls still standing to a height of over 4 feet. **Clearing of passages adjoining tower.**

Refuse of all kinds had completely filled the passage, and within it was found embedded the remarkable collection of Early Sogdian documents on paper, T. XII. a. ii. 1–8 (Plates CLIII–CLVII), to be discussed presently. According to the Naik's statement, which I have every reason to accept as accurate, their position was about 3 feet above the floor. In the refuse below them there turned up three Chinese slips, among them two complete ones, *Doc.* Nos. 607, 609. From the little **Early Sogdian, Chinese, and Kharoṣṭhī documents.**

room adjoining westwards came five more Chinese records on wood, also marked T. XII. a. ii, among them one, *Doc.* No. 593 (Plate XVII), bearing a date which, taken by itself, could safely be read on the spot as corresponding to A. D. 1, but about which M. Chavannes has since pointed out a certain chronological difficulty. Besides very numerous fragments of different-coloured silks, a wooden seal case, and other miscellaneous relics the refuse of the passage also yielded the interesting fragment of a document, T. XII. a. ii. 20 (Plate XXXIX), written on silk and containing nine lines of Kharoṣṭhī.

Dated Chinese records from T. XII. a.

Before considering the questions raised by these important finds of documents in scripts of Western origin, I must briefly refer to the chronological and antiquarian evidence furnished by the Chinese records from this watch-station. Of special interest among them is the completely preserved tablet T. XII. a. 3, *Doc.* No. 592 (Plate XVII). With particular precision in the dating it records the exact length of the service rendered by a certain corporal, a native of the Tun-huang command, in the first and second years of the Ti-huang period of Wang Mang's reign, corresponding to A. D. 20 and 21.[4] That this station of the Limes must have been occupied during Wang Mang's usurpation is made equally certain by four more records from T. XII. a, *Doc.* Nos. 596, 598, 599, 600, which mention the *Kuang-hsin* 廣新 company. M. Chavannes points out that the name *hsin* was given to the new dynasty which Wang Mang pretended to have founded, and that consequently the designation *Kuang-hsin*, which means '[the company] which increases the power of the Hsin [dynasty]', possesses a definite chronological significance. In T. XII. a. ii. 9, *Doc.* No. 593 (Plate XVII), we have a clearly written date of the first year of *Yüan-shih*, which would correspond to A.D. 1, and as this takes us very close to Wang Mang's period (A.D. 9–23), I am inclined to accept it, notwithstanding the difficulty which arises from the cyclical designation of the month as recorded in the document, and which M. Chavannes is unable to solve.

Post occupied under Wang Mang.

Kuang-hsin company of Kuan-chi.

In No. 596 we find the Kuang-hsin company spoken of as 'of Kuan-chi'. I have already had occasion to remark that this local name, which is found also in No. 597, a record from T. XII relating to the Hsien-ming company, may probably designate the place itself where the two closely adjoining watch-towers T. XII and T. XII. a are found.[5] It is certainly of interest to note that in the two wooden labels, *Doc.* Nos. 598, 599 (Plate XV, XVI), which were intended to be affixed to certain cross-bows specified in them, the Kuang-hsin company owning these weapons is designated as 'of Yü-mên', or the Jade Gate. But this local designation by no means obliges us to assume that this famous frontier-station was in Wang Mang's times, or in any other, actually located at T. XII. a itself. When discussing below the ruins of T. XIV I shall be able to give adequate archaeological and topographical reasons for the belief that this important site marks the position which the head-quarters station of the 'Jade Gate' occupied as long as the western Limes was guarded during Han times. The distance from T. XII. a to T. XIV is only about five miles, and there could be no difficulty whatever about a detachment posted at the former, a mere outlying station on the wall, being commanded from the 'Jade Gate' headquarters at T. XIV. Exactly in the same way we meet with the name of 'the *Tang-ku* company of *Yü-mên*' at T. XIII, the next watch-tower along the wall eastwards, after having before come across it at T. XI coupled with the local name of Kuan-chi.[6]

[4] The various points of chronological and antiquarian interest presented by this record have been discussed in full detail by M. Chavannes, *Documents*, pp. 128–31.

[5] Cf. above, p. 668.

[6] See *Doc.* No. 401; above, p. 668.

SECTION IV.—THE EARLY SOGDIAN DOCUMENTS FROM T. XII. A AND THEIR PAPER

The most important find made at T. XII. a was undoubtedly the collection of paper documents in a previously unknown script, T. XII. a. ii. 1–8. Their outer appearance, after unfolding, will be found fully detailed in the Descriptive List of Chap. XX below. All of them, when discovered, were folded up into neat little convolutes measuring between about $3\frac{1}{2}$ and 5 inches in length and between approximately 1 and $1\frac{1}{8}$ inches across, as seen in Plate CLIII. This shows seven of them in their unopened condition. Three, T. XII. a. ii. 1, 3, 5, still retained their original fastening with tightly drawn string, apparently of silk. One, T. XII. a. ii. 2, was found wrapped in brownish silk and thus enclosed in an envelope of coarse fabric, probably linen. This envelope was sewn down on the edges and bore outside seven lines of the same script, probably meant for an address (see Plate CLIV). The document T. XII. a. ii. 4, which Plate CLV reproduces after complete opening, was also found folded up; but as it was not tied and was less brittle than most of the others, it could be partially opened, and the inside examined on the spot. The subsequent complete unfolding of all the documents was a difficult task, and was effected in 1910 by competent hands at the Bodleian Library, Oxford, under the careful supervision of my friend Dr. A. Cowley, who at my request had undertaken the first examination of their script and contents. *Paper documents found at T. XII. a.*

All the documents had been originally folded along the shorter side into a narrow convolute, which was again doubled before being tied down. This compact folding of the letters—for as such they could at once be recognized from the address written on the back of almost all the rolls—is likely to have helped to preserve the writing, nearly everywhere black and clear. But it also explains the damage from fraying which the paper, as seen in Plates CLIV–CLVII, has suffered on the middle line parallel to the longer side.[1] Except for this damage and minor injuries which have occurred on the outer edges of some, the eight documents have survived in a remarkable state of preservation, a circumstance which is likely to prove of great help for their final decipherment. It may be noted here that the method of folding just described agrees in essentials with that observed in the Kharoṣṭhī documents on leather and paper which I recovered from the Niya and Lou-lan Sites respectively.[2] But in their case the outside of the folded-up document does not display an address written on the back of the sheet, as is found on all the complete paper documents from T. XII. a. ii.[3] *Folding and addressing of letters.*

The rectangular sheets of paper on which these letters are written show a certain regularity of dimension which suggests the prevalence of a standard size for the material used. In six out of the seven complete documents, viz. T. VI. a. ii. 1, 2, 3, 4, 7, 8, the length varies only between about $15\frac{1}{2}$ and $16\frac{1}{2}$ inches. We have an equally striking agreement as regards the width, which in six out of the eight pieces, viz. T. XII. a. ii. 1–6, measures from $9\frac{1}{2}$ to $9\frac{3}{4}$ inches. Without having access to original Chinese sources of information as regards the early manufacture of paper, I am unable at present to state more about the usual length of these *Size of paper sheets.*

[1] The only exception to this is T. XII. a. ii. 1 (Pl. CLIII, CLV), which has remained quite perfect in the middle. In T. XII. ii. 6 (Pl. CLVI), on the other hand, the left half of the document appears to have been lost owing to this doubling up.

It is, perhaps, not merely accidental that in the latter document the top portion of the inscribed inner surface of the letter was found displayed on the outside of the convolute, as originally discovered (see Pl. CLIII), instead of the address as usual. The letter must have been opened and folded up again, but in the wrong way, before it found its way on to the rubbish-heap, probably in a torn condition.

[2] For reproductions of such Kharoṣṭhī documents see *Ancient Khotan*, ii. Pl. XCI–XCIII; *Serindia*, Pl. XXXIX.

[3] See Pl. CLIII. The only document on which no address can be traced is T. XII. a. ii. 7 (Pl. CLVI), and this has lost most of the middle portion of the sheet.

pieces than that it agrees remarkably with the length of individual sheets of paper which compose some of the oldest of the Chinese manuscript rolls recovered by me from the walled-up library of the 'Thousand Buddhas' at Tun-huang.[3a] We are in a better position as regards the width observed in them. This width, of $9\frac{1}{2}$ to $9\frac{3}{4}$ inches, closely approaches the standard length of the great mass of our Chinese 'slips' in wood and bamboo from the Limes, as well as from the Niya and Lou-lan Sites, viz. 9 to $9\frac{1}{2}$ inches. The inference necessarily suggests itself that the paper used for our documents was intentionally adapted in size to the standard fixed for the slips of the wooden stationery which still continued in use at the same period.

Height of Chinese wooden slips.

We know from abundant textual evidence examined by M. Chavannes that the standard fixed in Han times for the 'slips' used by private individuals, as distinct from those reserved for imperial edicts, classical and ritual texts, etc., was one foot.[4] The ancient measures which I discovered at T. VIII and T. XI, and which I have already discussed, have proved that the foot of the Han epoch represented a length equivalent to 9 inches (23 centim.).[4a] To this measure the vast majority of the thousands of 'slips' of wood and bamboo brought to light by the excavations of my three expeditions conform very closely.[5] Now the length thus fixed for the wooden stationery in ordinary use during Han times, if not earlier also, has continued to the present day to determine the height of the vertical lines used for Chinese writing in private correspondence, and consequently also of the stationery commonly prepared for it in China.[6] It appears to me, therefore, highly probable that the width prevailing in our Early Sogdian documents from T. XII. a was dictated by the same reason, i. e. the conventional size prescribed for contemporary Chinese correspondence. As paper is not as well protected from fraying and the like deterioration at the edges as wood or bamboo is, the provision of a margin by a slightly increased width had much to recommend it.

Conventional size of paper.

Paper first invented A.D. 105.

But more interesting still from the antiquarian point of view and of a direct archaeological importance is the material on which these documents of T. XII. a are written. The use of paper for them seemed at first scarcely less of a problem than the script, unknown though of manifestly Western origin, in which they were written. On the one hand, there is the fact established by precise and fully authenticated Chinese historical evidence that the first invention of paper, by Ts'ai Lun, dates from A. D. 105.[7] On the other hand, the careful examination by M. Chavannes of the many exactly dated documents recovered from the ruined stations of the Tun-huang Limes has proved that none of them come down later than the year A. D. 137.[8] Nor is the lower chronological limit appreciably shifted if we accept the date A. D. 153, which is inferred for the fragment of a calendar T. XI. ii. 6, *Doc.*, No. 680.[9] From this and other archaeological evidence the conclusion

[3a] The length of individual sheets is: $16\frac{5}{8}''$ in roll Ch. 6, dated *circ.* A.D. 400; $14\frac{3}{4}''$ in Ch. 1181, dated A.D. 521; $16\frac{1}{4}''$ in Ch. 401, dated A.D. 522; $16\frac{5}{8}''$ in Ch. 478, dated A.D. 601. In manuscript rolls dating from the T'ang period the average length of sheets seems to be $18\frac{1}{4}$–$19\frac{1}{4}''$; see e.g. Ch. 79 (A.D. 700), Ch. 480 (A.D. 762), a Taoist treatise of A.D. 718.

[4] Cf. Chavannes, *Les livres chinois avant l'invention du papier* (*J. Asiat.*, 1905), pp. 27 note, 34.

[4a] See above, pp. 660, 668.

[5] Cf. *Ancient Khotan*, i. pp. 358 sq.; for the actual measurements of the slips discovered in 1906–7 at the Limes stations and the Lou-lan Site exact details are obtainable from the text and the plates of M. Chavannes' *Documents*. The finds made in the course of my explorations of 1914 are in complete agreement.

[6] I make this statement from what I observed, in Chinese Turkestān and Kan-su, about the size of the pink-coloured sheets of letter paper in general use for private correspondence, which have vertical ruling for the separate columns of Chinese characters. Each of the vertical spaces thus divided closely corresponds in width and length to the 'slips' of the ancient wooden stationery. It is significant that the expression 尺牘 derived from the one foot length of the 'slips' for private use now designates epistolatory correspondence in general; cf. Chavannes, *Les livres chinois*, p. 27 note.

[7] Cf. Chavannes, *Les livres chinois* pp. 5 sq., where the passage of the *Later Han Annals* relating to the invention of paper is fully quoted and discussed.

[8] Cf. Chavannes, *Documents*, p. vii; p. 116 for T. XV. a. i. 6, *Doc.* No. 536; also below, p. 700, chap. XX. sec. ii.

[9] See above, pp. 667 sq.; Chavannes, *Documents*, p. 145.

seems to be justified that the garrisoning of the stations of the Limes must have ceased some time in the second century A. D.

Use of paper in documents of T. XII. a.

Considering the short interval left between these chronological limits, the great distance separating the extreme western border of the empire from the centres of its industrial activity, and, last but not least, the conservative ways of Chinese civilization, as illustrated in respect of writing-material by the exclusive use of wood for the Chinese records of the Niya Site down to the latter half of the third century A. D., the discovery of these non-Chinese documents on paper at the watch-station T. XII. a, together with at least one clearly dated record of A. D. 21 and a number of others also belonging to the early years of the first century A. D., was obviously a matter of special interest. This induced me in 1910 to recommend samples of paper taken from these documents to the particular attention of Professor J. von Wiesner, the distinguished plant physiologist. To his long-continued and fruitful researches is due most of any exact knowledge that we possess of the development of paper manufacture in Central Asia and the East generally, and he had previously secured interesting results through the examination of a number of the papers represented among the manuscript finds of my first expedition.[10]

Prof. von Wiesner's paper analysis.

Professor von Wiesner's minute and painstaking microscopic analysis of these paper samples from T. XII. a has been rewarded by important discoveries, which have been set forth with great precision and clearness in his paper: *Über die ältesten bis jetzt aufgefundenen Hadernpapiere.*[11] In view of their distinct archaeological interest, it is necessary to summarize here the main points established. The examination of the specimens taken from different documents has definitely proved that the material of their paper was entirely made from textiles which had been reduced to pulp by a rough mechanical process of stamping.[12] The threads, still clearly recognizable by microscopic enlargement and undoubtedly made up of plant fibres, point very distinctly to production from a *Boehmeria*, which can scarcely be any other than the Chinese hemp (*Boehmeria nivea*), cultivated in China since the earliest times.[13] A particularly interesting observation made in the paper sample of T. XII. a. ii. 1. a revealed the presence of a textile fragment, much lacerated but still retaining even for the naked eye a characteristically woven appearance, the threads being laid lengthwise and across.[14] Professor von Wiesner is inclined to attribute this peculiar feature, found in the one sample only, to a more primitive procedure, which at first aimed at transforming thin linen fabrics into writing-material without completely destroying their texture, and shows good reasons for the belief that the paper in question represents a particularly early stage in the evolution of pure rag paper.[15]

Early use of pure rag paper.

In any case, the material of these documents conclusively proves that the manufacture of paper solely from linen rags must have been practised in China immediately after Ts'ai Lun's invention had been made, whereas until the discovery of the T. XII. a documents the use of rags could be traced in ancient papers from sites of Chinese Turkestān merely as a surrogate admixture to vegetable fibres which were obtained from the bark of the paper mulberry and similar trees.[16] The point is of special importance, because it definitely disposes of the previous belief which ascribed the origin of rag paper to an Arab invention first made at Samarkand about the middle of the eighth century A. D. and thence spread through the Near East to Europe.[17] But the fact now

[10] See v. Wiesner, *Ein neuer Beitrag zur Geschichte des Papieres*, in *Sitzungsberichte der K. Akad. der Wiss.*, Vienna (1904), vol. cxlviii; also *Mikroskopische Untersuchung . . . asiatischer Papiere*, etc., in *Denkschriften der math.-naturw. Klasse der K. Akad. der Wiss.*, Vienna (1902), vol. lxxii.

[11] Published in *Sitzungsberichte der K. Akad. der Wiss.*, *Philos.-Histor. Klasse*, Vienna (1911), vol. clxviii, Abh. 5, pp. 1–26 (quoted from reprint).

[12] See v. Wiesner, *loc. cit.*, pp. 15 sqq., 22 sq.

[13] See *ibid.*, p. 18.

[14] Cf. *ibid.*, p. 14, with Fig. 1.

[15] See *ibid.*, pp. 16 sqq.

[16] See *ibid.*, p. 9.

[17] For references to this early Arab paper manufacture

established is equally important for us also because it affords a striking confirmation for the above-quoted statement of the Later Han Annals that Ts'ai Lun, when he made his invention of paper, used as material for it old linen rags and fishing-nets, as well as the bark of trees and raw hemp.[18] Considering the total absence of pure rag paper among the very numerous manuscripts from Chinese Turkestān, dating from the fifth to the eighth century A.D., which Professor von Wiesner had previously analysed,[19] its appearance in the documents from T. XII. a may be accepted as a distinct proof of their far higher antiquity. In full agreement herewith is the fact—and Professor von Wiesner has duly emphasized the weight of its evidence—that the paper of these documents shows no trace of that 'sizing' with starch or other gelatinous matter which characterizes most of the later papers found in Chinese Turkestān, and which already appears in a Chinese document from the Lou-lan Site, L.A. VI. ii. 0230, *Doc.*, No. 912, dated A.D. 312.[20]

Paper shows no 'sizing'.

Paper confirms early date of documents.

Thus the results of Professor von Wiesner's important researches tend distinctly to support the conclusion as to the early date of these documents which may be inferred on archaeological grounds. Hence their discovery at an ancient watch-station of the Limes, which we may assume to have been abandoned about the middle of the second century A.D., can be fully reconciled with the known date of the invention of real paper, A.D. 105. Accepting this explanation of what at first sight might have appeared a chronological puzzle, we have no difficulty about accounting either for the discovery, among the remains of other stations on the Limes, of a few fragments of Chinese paper documents or for their extreme scarcity.[21] They are only three in all, *Doc.* Nos. 706–8, and were found at T. XIV, T. XV. a, and T. XXIII. a respectively.[22] The trifling number of these paper fragments as compared with the thousands of pieces of wooden stationery, inscribed or blank, found along the Limes is, in fact, striking evidence of the early abandonment of its stations. This is well brought out by comparison with the Chinese documents found at the Lou-lan Site, which was abandoned about two centuries later. There the number of documents on paper amounts to about 20 per cent. of the total of separate Chinese records found, the rest being on wood.[23] In judging of this much increased proportion, it must further be remembered that the Lou-lan Site was far more distant from the places of paper production in China and accessible to trade only by a difficult route then gradually passing out of use.

Scarcity of paper fragments on Limes.

and its known dependence on the teaching of Chinese prisoners of war, see the publications on the papers of El-Faiyûm, *Papyrus Erzherzog Rainer* (1885–87), quoted by v. Wiesner, *loc. cit.*, p. 2.

[18] See above, p. 650; Chavannes, *Les livres chinois*, p. 6. According to a Chinese authority quoted by M. Chavannes, p. 6, note 2, each one of the above substances was used by Ts'ai Lun separately for a different kind of paper. Prof. v. Wiesner, *loc. cit.*, p. 4, rejects this statement. But there does not seem to me as yet adequate evidence available to decide the matter.

[19] See v. Wiesner, *Ein neuer Beitrag zur Geschichte des Papieres*, pp. 4 sqq., 24.

[20] Cf. v. Wiesner, *Über die ältesten . . . Hadernpapiere*, p. 13, with note 2 (the number *904* there printed is taken from a provisional numeration of M. Chavannes).

[21] I need not take into consideration here the fragments of certain Chinese Buddhist texts on paper, *Doc.* Nos. 710–20, from T. XIV. v, for which see below, p. 687, because the place at which they were found was that of a shrine which had been built over far earlier remains and was proved by textual and numismatic evidence to have been occupied during T'ang times. To these the fragments on paper undoubtedly belong, one being certainly that of a text translated after A.D. 650.

[22] The last-named fragment is written on a tissue-like paper, so thin and soft that the thought has suggested itself to me of its possibly representing a relic of that earliest attempt to make paper which, as M. Chavannes has shown by a brilliant analysis of a passage of the *Shuo wên*, a text completed in A.D. 100, preceded Ts'ai Lun's invention (cf. Chavannes, *Les livres chinois*, pp. 8 sqq.). But this is a mere conjecture, of quasi-amateur nature, and, perhaps, might not need any mention at all if it were possible at present to submit a sample for Professor von Wiesner's expert examination.

[23] For convenience I have taken the figures for Lou-lan Site records on paper and wood respectively from those which M. Chavannes has included in his *Documents*. There are Nos. 894–939 on paper and Nos. 721–893 on wood. The proportion would not be affected if the uninscribed pieces were also taken into account.

From the outward appearance and material of these strange documents from T. XII. a. ii we may turn now to their script and language. All the letters had been found neatly folded up, and several still tied with string. But some, as seen in Plate CLIII, displayed writing outside, in what obviously were addresses, T. XII. a. ii. 1–3, 5; two others (4, 6) among the small rolls I actually managed partially to open out in spite of the very brittle paper. It was thus easy for me to convince myself that the writing was in the same unknown script, resembling early Aramaic, which I had first come across in that single small piece of paper from the Lou-lan Site, L.A. VI. ii. 0104, referred to above and reproduced in Plate CLIII.[24] Not being a Semitist, I was not able to make any attempt at decipherment nor do more than conjecture the language in which the documents were written. That this Semitic script found on the border of China might have been used for an Īrānian language seemed to me *a priori* probable. The fact of these documents having been discovered at a ruined watch-station, quite close to the ancient route by which the silk trade of China in the centuries immediately before and after Christ passed to the regions on the Yaxartes and Oxus, naturally suggested a connexion of the surmised Īrānian language with Sogdiana or Bactria. Not having then discovered the tablet in the same script from T. VI. c,[25] I felt at the time tempted to think that these might be letters left behind, perhaps, by some early traders from Sogdiana or still further west, who had come for the silk of the Seres.

Script resembling early Aramaic.

Surmise of Īrānian language.

It is not at present safe to examine any such questions of detail and to attempt to find the answers. But the researches of two valued scholar friends—one, alas, no more—have produced gratifying proofs that the script and language of those papers are really connected with Eastern Īrān, as I first conjectured. As the results obtained by them have been published in easily accessible papers, I may restrict my remarks here to the essential facts. Dr. A. Cowley succeeded at the outset in correctly identifying the majority of the characters.[26] To him belongs also the merit of having established that the writing was, indeed, of Aramaic origin, though showing a distinctly individual development, and that the language of the documents was Īrānian, with an admixture of Semitic words mostly in the form of 'cryptograms' similar to, but far less numerous than, those which are found in Pahlavī. Some of these words were definitely deciphered, and, being found both in the introductory formula and in a few short lines on the back of T. XII. a. ii. 4, enabled Dr. Cowley to recognize the document as a letter, and partially to read its address.

Dr. Cowley's tentative decipherment.

Within a couple of months after the publication of Dr. Cowley's article, M. Robert Gauthiot, working solely on the basis of the reproduction of T. XII. a. ii. 4 and Dr. Cowley's comments, was able to prove in a brilliant paper[27] that the language of the documents was an early form of that Sogdian which Professor F. W. K. Müller's researches had first revealed in Buddhist manuscripts recovered from Turfān. Their writing was shown to represent a cursive Aramaic, intermediate between the Aramaic proper and the Sogdian script from which the Uigur alphabet had been evolved. These identifications were established in a conclusive fashion by a series of characteristic peculiarities, both in language and in script, which the correct decipherment of most words in the address and introduction of the letter permitted M. Gauthiot to determine.

M. Gauthiot proves Early Sogdian language.

With Dr. Cowley's cordial approval, I lost no time in furnishing M. Gauthiot, even before the publication of his paper, with complete reproductions of all the Early Sogdian documents, as they may now be appropriately designated. Rapid progress was being made by him in the publication and interpretation of the numerous Buddhist texts in later Sogdian which the great hoard of

M. Gauthiot's death stops decipherment.

[24] See above, p. 383.

[25] Cf. above, p. 652.

[26] See his paper *Another unknown language from Eastern Turkestan*, *J.R.A.S.*, 1911 (January), pp. 159–66, where the document T. XII. a. ii. 4 has been reproduced in facsimile.

[27] *Notes sur la langue et l'écriture inconnues des documents Stein-Cowley*, *J.R.A.S.*, 1911 (April), pp. 497–507.

manuscripts at the 'Thousand Buddhas' of Tun-huang had yielded up. This justified the hope that, aided by the abundant new materials thus secured, M. Gauthiot would be able to advance steadily towards a full decipherment of our Early Sogdian documents in spite of the serious difficulties necessarily presented by their character as private, or possibly official, letters and by their cursive script. His labours in this as in many other directions were soon interrupted by the outbreak of the war. Through his untimely death in 1916, from a wound received many months earlier, Īrānian studies have suffered irreparable loss, and the elucidation of my Early Sogdian finds has been most unhappily retarded.

Question of origin of documents.

In view of this heavy blow it is a comfort to know that by making, in Plates CLIII–CLVII, practically the whole of the documents accessible I have assured, for other scholars also, the possibility of progress towards complete decipherment. The considerable length of the text contained in several of the letters—T. XII. ii. 2, 3 and 5 show no less than 60, 35, and 32 lines respectively—, the good condition of the writing in most of them, and, last but not least, the clear separation of the words, are features specially justifying this hope. Upon such progress must depend the decision of the historically interesting question whether these letters emanated from traders who merely passed along the route, coming from, or returning to, what was the *Scythia intra Imaon* of the first centuries after Christ, or whether they were written by people of Sogdian origin settled near the Limes and possibly employed on its defence.

Early silk trade with west.

When discussing above the Early Sogdian tablet found at the outlying watch-post T. VI. c, I have already explained the reasons for keeping the latter possibility carefully in view.[28] As regards the former it will suffice to refer to the eloquent testimony contained in what Ptolemy has preserved for us of Marinus' account of the trading agents of 'Maës, the Macedonian, also called Tatianus', who used to travel from even more distant parts of Western Asia for the silk of the Seres. An exact modern parallel is to be found in the frequent journeys undertaken by Muhammadan traders from Farghāna, usually known as Andijānīs, to Kan-su and even distant Ssŭ-ch'uan and Yün-nan, for the sake of bringing silk and tea. In my Personal Narrative I have had occasion to record instances of similar enterprise of Afghān traders from Bājauṛ or Kābul, such as my friend Shēr 'Alī Khān.[29] When I come to the remains of T. XV. a, I shall have occasion to mention an actual relic left behind by an ancient silk trader from the West, in the shape of the end of a silk bale which has an inscription in an Indian language, written in Brāhmī characters.[30]

Early adoption of paper by foreigners.

How these letters in Early Sogdian script and language had found their way to the rubbish-heap of a watch-station not immediately on the trade route, and most of them apparently unopened, is a question to which an answer could scarcely be hoped for, even after their decipherment. But we are in a better position with regard to another minor point of archaeological interest, when we come to consider the question why paper, certainly a product of China proper and manufactured first in parts far away from the Central-Asian border province, should be found there in the correspondence of foreigners from the distant West, and that within a few decades apparently after its first invention. The explanation is, I think, to be sought in the very fact that the writers were of foreign origin, and in the nature of the script that they used.

The passage of the Later Han Annals relating the invention of paper significantly indicates the inconveniences of the writing-materials previously available in China:[31] 'Since antiquity written documents were most frequently bundles formed of bamboo slips; when silk fabrics were used [in the place of bamboo slips], these fabrics were known by the name *chih* 紙. The silks were

[28] See above, pp. 652 sqq.

[29] Cf. *Desert Cathay*, ii. pp. 38, 68.

[30] See below, pp. 701 sqq., and T. XV. a. iii. 57 in Descriptive List, chap. XX. sec. vii.

[31] Cf. Chavannes, *Les livres chinois*, p. 6.

expensive, and the slips were heavy; both were inconvenient. Ts'ai Lun hence conceived the idea of utilizing the bark of trees, etc.' Traders and others from the West who proceeded to China after intercourse with the Western Regions had been opened up must have felt the inconveniences of such writing-materials far more even than the Chinese themselves. Owing to the nature of the Chinese language and script, a single slip of bamboo might suffice for fifty ideograms or more, conveying a whole edict, order, or letter, as plenty of the wooden documents in M. Chavannes' publication show.[32] In the same way, a small strip of silk would afford space enough for a long private epistle, as we can still see in T. XIII. i. 003. a, *Doc.* No. 398 (Plate XX). In an alphabetic script and inflexional language, communications of similar character and import would need vastly more space, with a corresponding addition either to the weight of wood to be carried (bamboo slips would have been practically out of the question) or to the cost of the silk. Sheets of leather or birch-bark, such as might have been used in Sogdiana, are never mentioned among the ancient writing-materials of China. Hence it is easy to realize how eager strangers from the West, finding themselves within China's Wall, must have been from the first to avail themselves of the new invention, 'the honourable Ts'ai's *chih*', to use the early Chinese term for paper. There is every reason to believe that it must have been taken up by them far more rapidly than by Ts'ai Lun's own countrymen with their strongly conservative habits.

Paper preferred for non-Chinese writing.

In this connexion it is of interest to note that in the very same dustbin, T. XII. a. ii, there was found also the fragment of a Kharoṣṭhī document written on silk, T. XII. a. ii. 20 (Plate XXXIX). It is the only piece of that material and script so far discovered which represents the remains of a letter or order.[33] Its badly-torn condition leaves no hope that decipherment will give us a clue to the person and place from which this record in Indian language and in another script derived from Aramaic originated. Its discovery in the same place as the Early Sogdian letters on paper is certainly curious, and so also is that of a birch-bark fragment, T. XII. a. 0040. This small piece is uninscribed. Yet, considering how remote the Tun-huang Limes is from any mountain areas which could have supplied this material (the Hindukush, the Himālaya, the Western T'ien-shan, or the Central Nan-shan), the thought suggests itself that it might have come there as part of a leaf or roll used for writing.

Fragments of Kharoṣṭhī record on silk and of birch-bark.

Section V.—THE WATCH-STATIONS T. XII AND T. XIII

It was to the south of the tower T. XII. a and at a distance of about 83 yards that, on one of my early reconnaissances along this portion of the Limes, I first noticed very puzzling remains, subsequently met with also at other watch-stations. They consisted here of a series of queer little mounds rising above the bare gravel and arranged, as Plate 39 shows, in regular rows crossing each other at right angles. The distances between the small structures—for as such I could soon recognize them—averaged from 16 to 18 yards. Closer examination showed that they all measured about 7 feet square at their base and were built up entirely of fascines of reeds, laid crosswise in alternate layers. Their height varied considerably, from about 1 to 7 feet, without any obvious cause of such variation. Wind-erosion could not well be the sole or main cause; for in such a position it was bound to affect all these little structures with something like uniformity, and nowhere had it scooped out the ground at their base to more than a foot or so. A sprinkling of coarse sand and gravel intermingled with the fascines of reeds. Whether this had been added by

Stacks of reed fascines.

[32] The imperial edict reproduced in T. VI. b. i. 289, *Doc.* No. 60 (Pl. III), may serve as a good example.

[33] The inscribed silk pieces, M. III. 0015 (Pl. XXXIX), from one of the Mīrān temples belonged to a votive banner or streamer. The small strip, L.A. VI. ii. 0235 (*ibid.*), with a few words in Kharoṣṭhī, seems to have been torn off from the edge of a bale of silk; see above, pp. 383, 436.

the builder or was merely a result of their having caught and retained the sand and small pebbles which gales of special violence had driven against them could not be determined.

Purpose of stacked fascines.

There was no doubt that the Toghrak sticks which were found driven vertically through the fascines had been intended to secure them when first stacked. But no strengthening of this sort was needed any longer; for, through the action of the salts which had permeated both the fascines and the soil, the reeds had attained a quasi-petrified condition and considerable consistency, though each reed, when detached, still showed a good deal of flexibility in its fibres, as proved by the specimen T. XII. a. 0041. It was this very quality, no doubt, which together with the extreme dryness of the climate had enabled these stacks of mere reed straw to withstand the destructive effect of two thousand years. But what could their original purpose have been? The regularity with which these strange stacks were laid out at T. XII. a, and also, as Plate 38 shows, at the neighbouring post T. XIII, made me at first think of some defensive purpose, as if they had been intended for a zareba. With such a supposition it would have been possible to reconcile the evident fact that some of the stacks, both at T. XII. a and also elsewhere, were found to have been burned, their position being still clearly marked by plentiful calcined fragments, of which the slag-like pieces, T. XII. a. 004, 0037–38 (Plate LII), are specimens. But this idea had very soon to be abandoned when I subsequently came across remains of exactly similar stacks at other watch-posts quite irregularly disposed where, as at T. XI, the ground near the towers was much cut up by ravines or otherwise restricted.

Size of fascines same as in Limes wall.

Another suggestion promptly presented itself when repeated measurements showed that the dimensions of the neatly laid bundles of reeds always corresponded exactly to those of the fascines used for building the Limes wall. It seemed easy to assume that these were stacks of the fascines kept ready at the watch-stations along the wall for any urgent repairs. Thus eventual breaches in it, from whatever cause they might arise, could be quickly closed without the necessity of collecting and carrying the required materials over a considerable distance. Seen in this light, the stacks of fascines at once reminded me of those of wooden sleepers that we see neatly piled up at railway stations. The explanation appeared plausible enough, as it accounted for the identical length, 7 feet, of the fascines both in stacks and wall, and I still think that the size was originally determined by the structural requirements of the wall. But, as regards the main purpose for which the fascines were kept stacked, subsequent observations have led me to form a different view.

Stacks found at T. VI. b.

It was first at the headquarters station T. VI. b of the south-west flank of the Limes, described above, that I became fully convinced of the need of another explanation. There I found, as already briefly mentioned, the remains of a series of exactly similar stacks, six in all, extending along the east and south-east edge of the plateau, with intervals of about 20 to 30 yards between them.[1] That in these stacks some of the fascines consisted of reeds and some of small Toghrak branches, the fascines of different materials being placed in alternate layers, did not surprise me; for on that flank of the Limes both materials were equally close at hand. But the fact that there certainly never existed a wall near T. VI. b or anywhere else along that flank of the Limes plainly proved the previous explanation of the stacks to be untenable.

Stacks in calcined condition.

Then it came back to my mind that, not only at T. XII. a but also at other watch-stations, such as T. XIII, T. XV. a, etc., I had found some of the stacks reduced by fire to mere calcined fragments. It was, of course, possible to explain this as wilful damage done by raiders and the like. But a far more satisfactory explanation both of the partial burning and of the main purpose of the stacks was obviously to be found in their use for fire-signals. That a system of such was regularly organized along the Limes could be assumed *a priori* as highly probable, and that there was evidence of it

[1] See above, pp. 650 sq.

in the Chinese records brought to light by my excavations I knew already from some which Chiang Ssŭ-yeh had been able to decipher on the spot. But it needed M. Chavannes' translations, as embodied in his *Documents*, to show me how frequent these references to fire-signals are in the records recovered from the different stations.[2]

The subject is one which will best be discussed below in the review of the general antiquarian information furnished by the documents from the Limes. Here it will suffice to point out two minor observations which support this interpretation. No doubt, such signals would ordinarily be lit on the top of the towers, whence fires, even if small, could be quickly sighted by the men on guard at neighbouring stations. The reddish burnt appearance of the clay on the top of several watch-towers where it still remained and was accessible bore direct testimony to this practice. But there might be circumstances, as on occasion of a particularly big fire needed to penetrate a murky night or to light up the foreground in expectation of an immediate attack, when it would be necessary to set a whole stack on fire. The fact that the remains of burnt stacks were usually found, as shown by Plate 39 in the case of T. XII. a, at points such as the south-east corner of the group, where the risk of igniting others was less, thus receives its proper explanation. The greatly varying height of the stacks, from 7 feet down to 1 foot only, at the same watch-station can best be accounted for by the successive use made of the stored materials for signal-fires kindled in the usual way on the tower itself. Fascines for lighting signal-fires.

After proceeding for about three-quarters of a mile to the south-east along the narrow plateau on which the watch-station T. XII. a and the adjoining segment of the wall are built, the tower T. XII (Fig. 181) is reached. It occupies the southern end of that gravel ridge where it drops down into the wide marshy depression which I have already had occasion to mention in connexion with my return to the Limes from Nan-hu.[3] The bogs and small lakes found in the Nullahs on either side of T. XII. a fill northward offshoots of the same depression. The latter is traversed by the caravan track to Lop close to the south of T. XII over ground slightly higher than the rest, and it is this topographical fact which explains why we find here the ruin of a watch-tower well removed from the line of the Limes wall. It is clear that the ancient route to Lou-lan must also have crossed the depression at this point, the ground further south being quite impassable owing to the large salt morass. A reference to Plate 33 or Map No. 74. D. 3 shows that a post maintained at T. XII was excellently placed for guarding the ancient route and watching the traffic passing along it. But we see also that it could not be intended to strengthen the defensive line of the Limes itself, as it is well behind it and near a segment of it which was adequately protected by the natural obstacles of impassable marshes. Position of watch-tower T. XII.

I am therefore strongly inclined to believe that the purpose of T. XII was to serve as a road-side post for what I may call the police control of the border as distinct from its military defence. Guards placed here could make sure that westward-bound travellers, traders, etc., had been duly authorized to proceed *extra muros* by those in charge of the 'Jade Gate', the main frontier station, located at T. XIV. From all that Chinese and foreign records show us of the administration of the *kuan*, or 'barrier', on the empire's western border during successive periods, we can feel quite sure that this function of the police cordon maintained there was always taken as seriously as it used to be until quite recent years at the *Chia-yü kuan* of Su-chou, the modern representative of the ancient *Yü-mên kuan*.[4] In the same way a preliminary watch could be kept here upon travellers, etc., Watch-post for police control of road.

[2] Cf. below, pp. 752 sqq. Here I may conveniently note the curious fact that we have a record of the collection of such fascines in one of the slips found at T. XII. a. ii, *Doc.*, No. 609. It mentions the respectable total of 42,390 faggots. M. Chavannes has correctly recognized that these must have been intended to be used either for kindling signal-fires or for repairing the wall.

[3] See above, p. 629.

[4] For Chia-yü kuan, the modern equivalent of Yü-mên, see *Desert Cathay*, ii. pp. 274 sqq.; below, chap. XXVII. sec. ii.

coming from the Western Regions, and effective safeguards taken that they would present themselves for examination at Yü-mên, i.e. T. xiv, instead of attempting to circumvent it, as the ground beyond T. xii might well have allowed them to do otherwise. Personal experience gained in the course of my travels both in the East and West justifies my belief that the system of 'double check' here assumed could be paralleled by exactly corresponding examples in abundance collected on modern administrative borders, customs lines and the like, as well as by plentiful earlier historical evidence of the same sort.[5] I may, in conclusion, point out that, while the position of T. xii is particularly well suited for an advanced post of control as described, it would certainly not have been convenient for an important headquarters station on this frontier, such as the Jade Gate undoubtedly was. The space available on the narrow plateau which at its end is occupied by T. xii is far too confined for this purpose, and the water in the marshes which almost completely surround it is salt now and probably was so in ancient times.[6]

Position not suited for head-quarters.

Remains of watch-tower T. xii.

The remains at T. xii were, as Fig. 181 and the plan in Plate 38 show, of a very modest kind. The badly-broken tower, originally about 21 feet square at its base, rose to about 18 feet in height. Its masonry consisted of bricks measuring about 15 by 8 inches and about 5 inches thick. The manner in which they were set, with the longer and shorter sides facing outwards in alternate courses, closely resembled that observed in T. ix. There were also the usual thin layers of reeds inserted after every three courses of brick. Parts of the broken brickwork on the north side were reddened as if through some conflagration, and this was fully confirmed when the much-decayed remains of a small structure came to be cleared a few yards off the north foot of the tower. Nothing survived there except the foundations of square walls apparently built of stamped clay. Within them a good deal of ashes and charred wood mingled with refuse. From the latter and a rubbish-heap adjoining on the west there were recovered over a dozen inscribed slips, mostly in poor preservation. Among those reproduced by M. Chavannes[7] only No. 597 need be noted here as referring to the 'Hsien-ming company of Kuan-chi' 官 吉. We have seen already that this may possibly have been the name of the locality occupied by T. xii and T. xii. a.[8] The numerous miscellaneous objects unearthed included fragments of greyish pottery of the familiar Han type, T. xii. 1–3 (Plate IV); wooden seal-cases, 12, 13, 002; a wooden fire-stick ('female'), 006; a bronze arrow-head, retaining its long iron tang, 0020 (Plate LIII); and several pieces of matting and cane basket-work, 0024, 0030, besides the usual fragments of wooden fittings, fabrics, etc.

Watch-tower T. xiii.

The marsh to the east of T. xii and T. xii. a deepened northward, and it was only after skirting it for two miles or so that its marginal salt bog became passable. By making this détour I was

There early references to the examination of travellers passing this 'barrier' are given. At the inner western gate of the fine fort dating from the spacious times of the Emperor Ch'ien-lung, I saw the office of the main guard where all travellers going west or east had still 'to show their papers' when Chiang Ssŭ-yeh passed through here before, about 1890, and probably later, too. During the last years of the decaying Manchu régime control had relaxed here—as elsewhere.

For a similar procedure at the ancient 'Gates' (*dvāra*, *draṅga*) guarding the passes through the mountain defences of Kashmīr, see my notes, *Rājat.* ii. pp. 391, 395; also the passages quoted *ibid.*, Index, s.v. *dvāra*.

[5] My latest experience illustrating this arrangement was on leaving Russian territory in October, 1915, from Askhābād for Meshed. There was a lengthy inspection of papers at the village of Gaudān, and some four or five miles beyond a final examination of the *visa* at the fortified Russian post that guards the cart-road close to where it crosses the Persian border on the watershed towards Bājgirān.

[6] It is desirable to draw attention to this topographical fact because M. Chavannes, on the strength of the documents Nos. 596–9 from T. xii. a and T. xii which mention certain companies of Yü-mên, has been led to assume that in Wang Mang's time the Jade Gate was placed in this locality. For another explanation of their designation, more in keeping with archaeological evidence, see above, p. 670. If similar inferences were to be drawn from Nos. 587 and 401, we should have to shift the Jade Gate also to T. viii and T. xiii, localities quite as unsuitable as T. xii. a and T. xii.

[7] Cf. Chavannes, *Documents*, pp. 132 sqq.

[8] See above, pp. 668, 670.

able to ascertain the interesting fact that this marshy depression had no surface connexion with the Su-lo Ho bed, which runs north of it deeply sunk in the ground like a hidden fosse. The same proved to be the case also with regard to other marsh-filled depressions as far east as T. XVII. The line of the wall was picked up again at a point where it faces the watch-tower T. XII. a across the marsh. There it descends from the edge of a broad gravel-covered plateau and was traceable till it disappeared among thick reed-beds that lay some 16 feet above the level then actually reached by the open water of the marsh. From this point the wall ran unbroken across the bare gravel 'Sai' for close on two miles to the watch-tower T. XIII. This (Fig. 180) was found in relatively fair preservation, with débris about 8 feet high that marked the position of small quarters adjoining it on the east and south. The tower was built of bricks of the same size as at T. XII, and with the same arrangement of the masonry. Its base measured 23 feet square, and its actual top reached a height of 24 feet above the level of the floor. When the débris was cleared from the small apartments immediately adjoining the tower on the east and south, I found that the face of its masonry retained several layers of plaster where it had been covered up by the walls of the quarters. Thus these are clearly proved to be a later addition.

Disposition of quarters.

The plan in Plate 38 illustrates the disposition of these rooms, of which the largest measured 13 by 8 feet. Fig. 180 shows them in course of excavation. A flight of stairs, built between room i and the east face of the tower, had once led up to the roof of the quarters, and thence probably to the top. Its steps, about 2½ feet wide, still retained the blocks of Toghrak wood with which they had been faced. Small recesses in the walls of rooms i, ii, and iii (the first is not shown in the plan through an oversight) served probably as cupboards for stores. Among the Chinese records found in the rooms, two slips furnish exact dates, *Doc.* No. 399 showing that of 56 B.C. and No. 400 that of A.D. 5. No. 401 (Plate XII) contains a reference to 'the *Tang-ku* company of Yü-mên', and the chief of this station is mentioned also in No. 399.

Private letters written on silk.

But of particular interest are the two private letters written on very fine greyish silk, *Doc.* Nos. 398, 398 a (Plate XX), which had been sewn up into the inner lining of a small silk bag, T. XIII. i. 003. a. For an account of the condition in which they were found, and to which their good preservation is, no doubt, due, reference may be made to the Descriptive List in Chapter XX, section vii. The two letters are addressed to an officer serving on the Tun-huang Limes by another employed far away on the northern frontier. They throw curious sidelights on the life led by such official exiles, besides furnishing us with actual specimens of an ancient writing-material which was previously known only from textual evidence, such as that quoted in connexion with the invention of paper.[9]

Miscellaneous finds at T. XIII.

The miscellaneous finds in the ruined quarters comprise a number of carved wooden brackets, variants of the type already described (T. XIII. i. 001, Plate LIV); several seal-cases in wood, one, T. XIII. ii. 003 (Plate LIII), still retaining the clay of the sealing; a bronze arrow-head fitted with three barbs, representing an unusual pattern, T. XIII. 005 (Plate LIII); a much-used broom of split cane, T. XIII. iii. 001, etc. At a distance of about 70 yards to the south of the watch-tower there survived remains of stacks of fascines, just like those described at T. XII. a, but far more decayed. Here, too, the intervals between the stacks arranged in rows crossing at right angles averaged about 16 yards.

Well-preserved stretch of wall.

Immediately to the east of T. XIII the ground dips into a shallow depression about 15 feet lower, and perhaps owing to the shelter thus afforded the line of the wall has survived here in a remarkable state of preservation, as seen in Fig. 176. For about 200 yards its height still rises to 10 or 11 feet, while the gravel and sand heaped up along its base may cover another 3 feet

[9] See above, pp. 676 sq.

or so. The layers of reed fascines had an average height of $2\frac{1}{2}$ to 3 inches, and the layers of stamped clay and gravel separating them were about 8 inches thick. The whole had hardened into cement-like consistency.

Ancient track along wall.

Along this portion of the wall the ancient track, worn by patrols and others as previously described, was visible with exceptional clearness, even while the sun stood high. It could be traced practically throughout to the edge of the great marshy bed eastwards, a distance of about a mile and a half. It kept uniformly about 9 yards from the foot of the wall, having a width of $1\frac{1}{2}$ to 2 feet and a depth of 4 to 5 inches. I could verify my observations about this strange track of Han times when I returned here in 1914, and I felt then less surprise at its having survived all those centuries, since I noted how clear were still the footprints my horse had left behind on my first inspection of it seven years before. After nearing the edge of the wide marshy depression, the wall descends to about 50 feet below the level of the 'Sai' and then continues across scrub-covered sand and gravel to within about 60 yards of the marsh shore. The actual water-level lay at the time of my visit about 8 to 10 feet below the foot of the last clearly traceable bit of wall.

CHAPTER XIX

THE JADE GATE BARRIER

Section I.—THE RUINED SITE T. xiv

Depression near station T. xiv.

The wide depression to which our survey of the Limes east of T. xiii has brought us forms a well-marked division on the line followed by the wall and by the once important route to the west that it was mainly intended to safeguard. Filled along its deepest portion by a series of lakelets or salt bogs, and bordered on either side by steep banks up to 50 feet in height leading up to flat gravel plateaus, it distinctly recalls the broad terminal bed of a river. The resemblance is not accidental. Looking at the Map (Nos. 74, 78) we can easily recognize that this depression, which from the commanding height of the walls of the fort T. xiv could be seen running far away to the south-east, represents the main terminal course once followed by the Nan-hu drainage towards its junction with the Su-lo Ho. Descending underneath the surface of the ground, this drainage still continues to feed the springs which give rise to the existing lakelets. Long before the historical period, no doubt, the ancient bed had assumed more or less its present aspect. But as the last traceable remains of the Limes wall end, on the west about 10 feet and on the east also about as much, above the present edge of the adjoining marshes, the possibility of the latter having shrunk since Han times must be kept in view.

Position of fort T. xiv.

However this may be, we can be quite sure that the change, if any, has not materially affected the immediate surroundings of the ancient fort T. xiv and the topographical reasons which account for its being placed here. As can be seen from the photographs in Figs. 179 and 183,[1] the fort and a mound adjoining it northward, which will be discussed presently as the site of important finds, occupy the top of a neck of raised ground which stretches isthmus-like across the depression and offers a convenient passage for traffic between the deep reed-fringed marsh to the north-west and the salt bog to the south-east.[2] The route to and from Lop had necessarily to follow the passage, which was completely commanded and guarded by the fortified post T. xiv established at this point. The position itself was rendered a naturally strong one by the nearness of the marshes to the north-west and south-east.[2a]

Distant view from ruined fort.

Its tactical advantages were further increased by the fact that the two knolls occupied by the ruined fort and the neighbouring mound, both resembling Mesa terraces in origin and character,

[1] The background on the left of Fig. 179 shows the low-lying marshy portion of the depression to the north of T. xiv.

[2] The map in Pl. 33 shows the position of T. xiv and the features of the depression more correctly than Map No. 74. D. 3. This records here mainly the survey made on our first visit in March, 1907, without the detailed features subsequently observed during my stay at T. xiv. The symbol marking the ruined fort requires to be shifted about half a mile to north-east and just within the line of the secondary wall indicated eastwards.

Pl. 33 had to be prepared before I could utilize the supplementary observations made in 1914. Nor is its scale large enough to permit adequate indication of all details.

[2a] I may note here that T. xiv proved to be known to the few Tun-huang people who visit the neighbouring ground for grazing ponies or for fuel by the appropriate designation of *Hsiao-fang-p'an* 小防盤 'the small protected camp'. The large ruined magazine T. xviii is called by them *Ta-fang-p'an*.

raise their top almost to the level of the gravel plateaus to the east and west. In consequence it was possible, as I ascertained by actual observation, from the parapet of the ruined fort not merely to scan the whole of the depression for a considerable distance, but also to keep a look-out over wide stretches of the level 'Sai' on either side and northward. This is best illustrated by the fact that I could sight from that point of vantage all the watch-towers of the Limes from T. XI to T. XIX, and that in spite of their present ruined condition. I have little doubt, from what practical experience on such desert ground has taught me, that, given reasonable atmospheric conditions, it would be possible to observe from there signal-fires lit at night on the ancient towers over even greater distances, probably from T. IX to T. XXII close to the shore of Khara-nōr, more than 30 miles in a straight line. Nor should other practical advantages be ignored which make this position obviously suited for a military and roadside station of importance. The depression both to the north and to the south affords ample grazing on reeds and scrub, and springs on the edge of the marsh, quite close to the north-west of T. XIV, provide drinkable water.

Massive construction of fort.

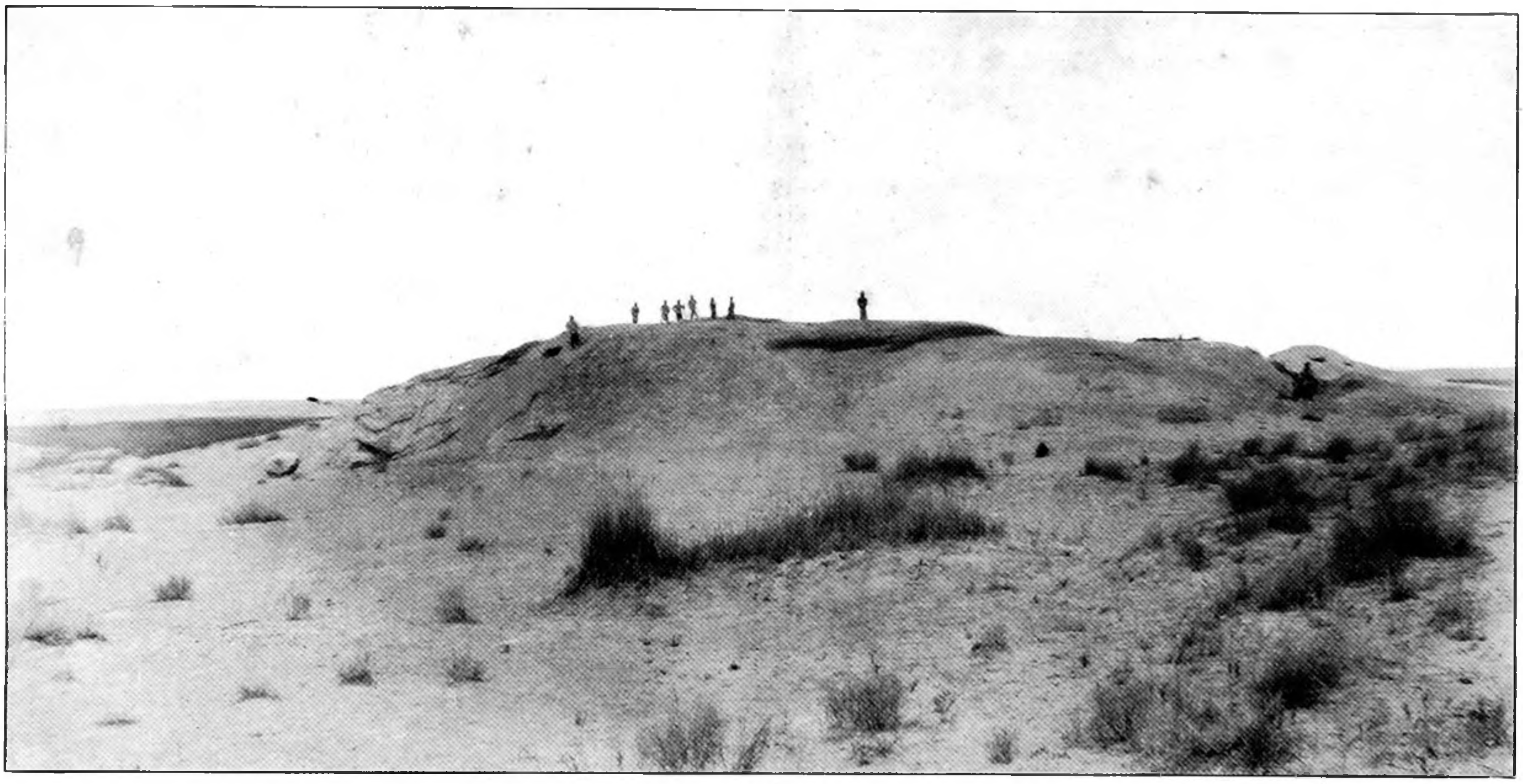
These considerations had from the first impressed me, and the fact of the position being occupied by a ruined fort of such massive construction as T. XIV seemed naturally to raise the presumption that it might mark the site of some sectional headquarters for this part of the Limes. But, imposing as the ruin of the fort looked with its thick walls of stamped clay, there was nothing in its structural features to serve as a definite indication of its age. I have already briefly described them in connexion with my first passage along this route, and Figs. 183, 184, which show the small stronghold as seen from the north-east and south-west respectively, together with Plate 40 will help to recall the essential details. Antiquity was suggested by the fact that, in spite of the thickness of the walls, fully 15 feet at the base, and the remarkable solidity of the clay, considerable portions of the outer faces to the north and east had fallen, obviously through wind-erosion. Its effect was clearly marked also by the under-cutting which the north-west corner had suffered, as seen in the photographs. More difficult to explain was the big opening, resembling a pointed arch and 13 feet wide below, which appeared near the middle of the wall of the fort facing north (Fig. 183). It seemed to have been caused accidentally by the mass of clay falling outward. The gap had been closed by rough brickwork which seemed late. The true entrance to the interior of the little stronghold led through the west wall, as seen in Fig. 184, and was only 8 feet wide. I noticed repairs of distinctly old appearance in the north-west corner, where a fissure in the wall had been filled up with fascines of reeds secured by Toghrak branches.

No datable remains within fort.

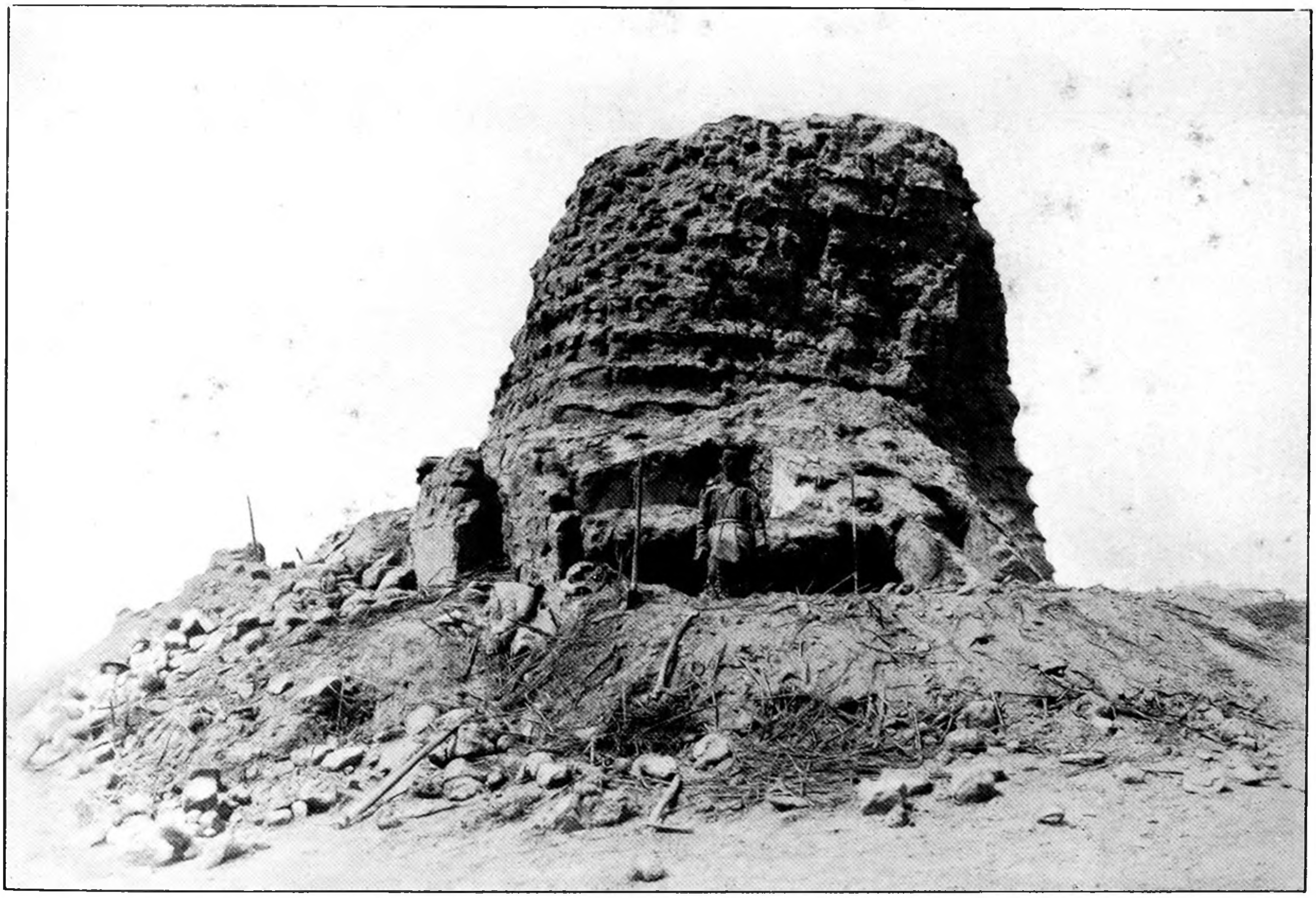
Within the fort I searched in vain for ruins of quarters or other approximately datable remains. It is true that the interior, about 54 feet square, was covered with a crust of refuse 4 to 5 feet high. But wherever I had this cleared to the natural soil only ashes, bones of animals, and stable refuse could be found. The complete removal of this unpromising stuff could not be attempted with the limited labour and time at my disposal. At the outside of the north wall I had come upon a thin layer of refuse with pieces of the same hard grey 'mat-marked' pottery which was common near the watch-towers. Similar finds near the surface induced me to continue the 'prospecting' towards the foot of a bare, gravel-covered hillock (Fig. 179), the western end of which lay about 70 yards to the north of the fort. It was on April 20, at which time the clearing of T. XII. a still kept almost the whole of my small working-party busy. But, as I made the man with me scrape the slope of the mound at different points, layers of straw and other stable refuse were disclosed in more than one place below the cover of gravel.

Discoveries on hillock.

Finds such as a blank slip of wood, a tiny piece of paper with a couple of half-effaced Chinese characters, and rags of silk and hemp had first encouraged hope when the man's spade, at a point about 15 feet above the west base of the hillock and about 6 feet below its top, laid bare

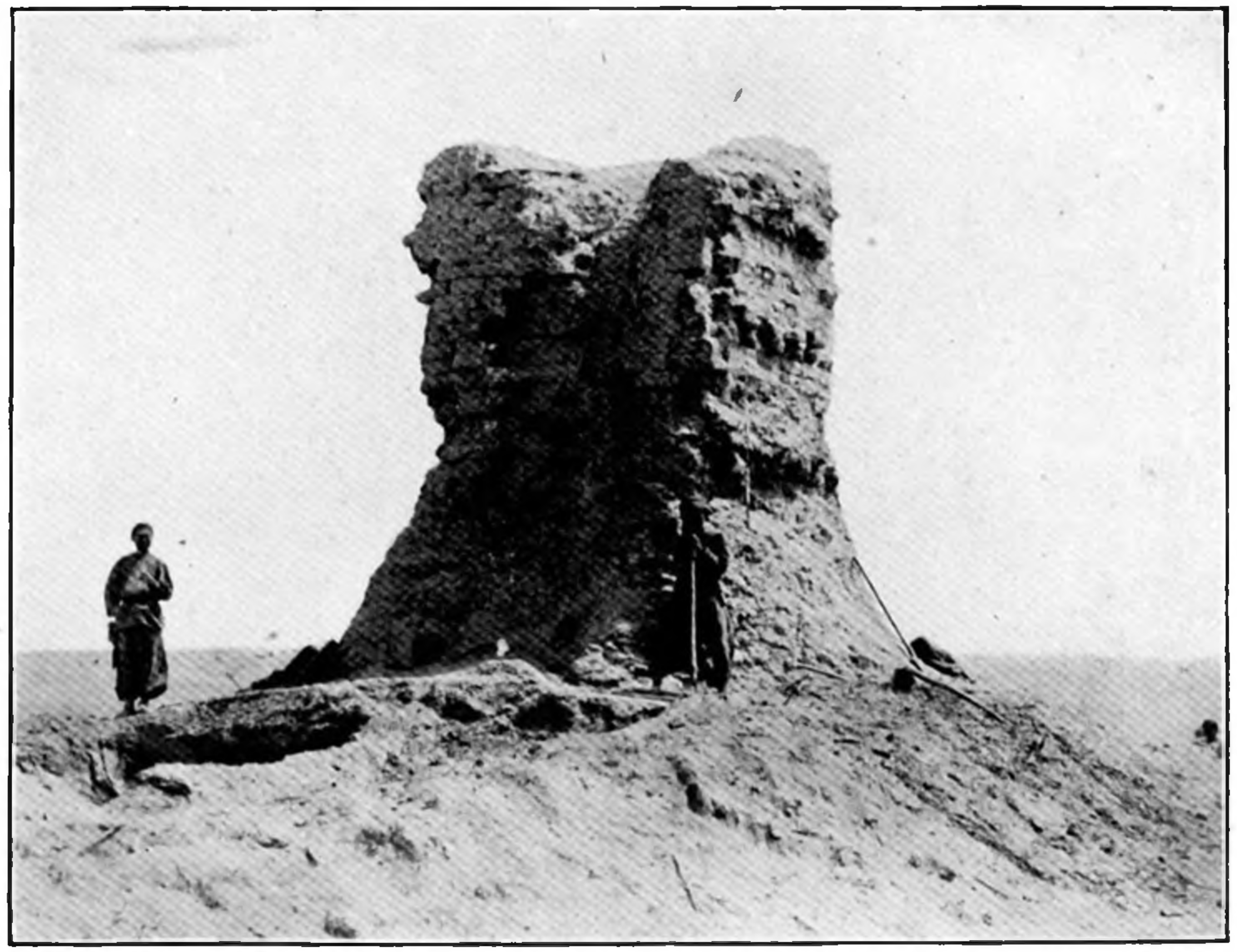


179. HILLOCK WITH REMAINS MARKING POSITION OF ANCIENT YÜ-MÊN STATION NEAR FORT T. XIV, TUN-HUANG LIMES, SEEN FROM SOUTH-WEST, BEFORE CLEARING.
Man standing on extreme left marks mouth of passage leading to covered shaft.

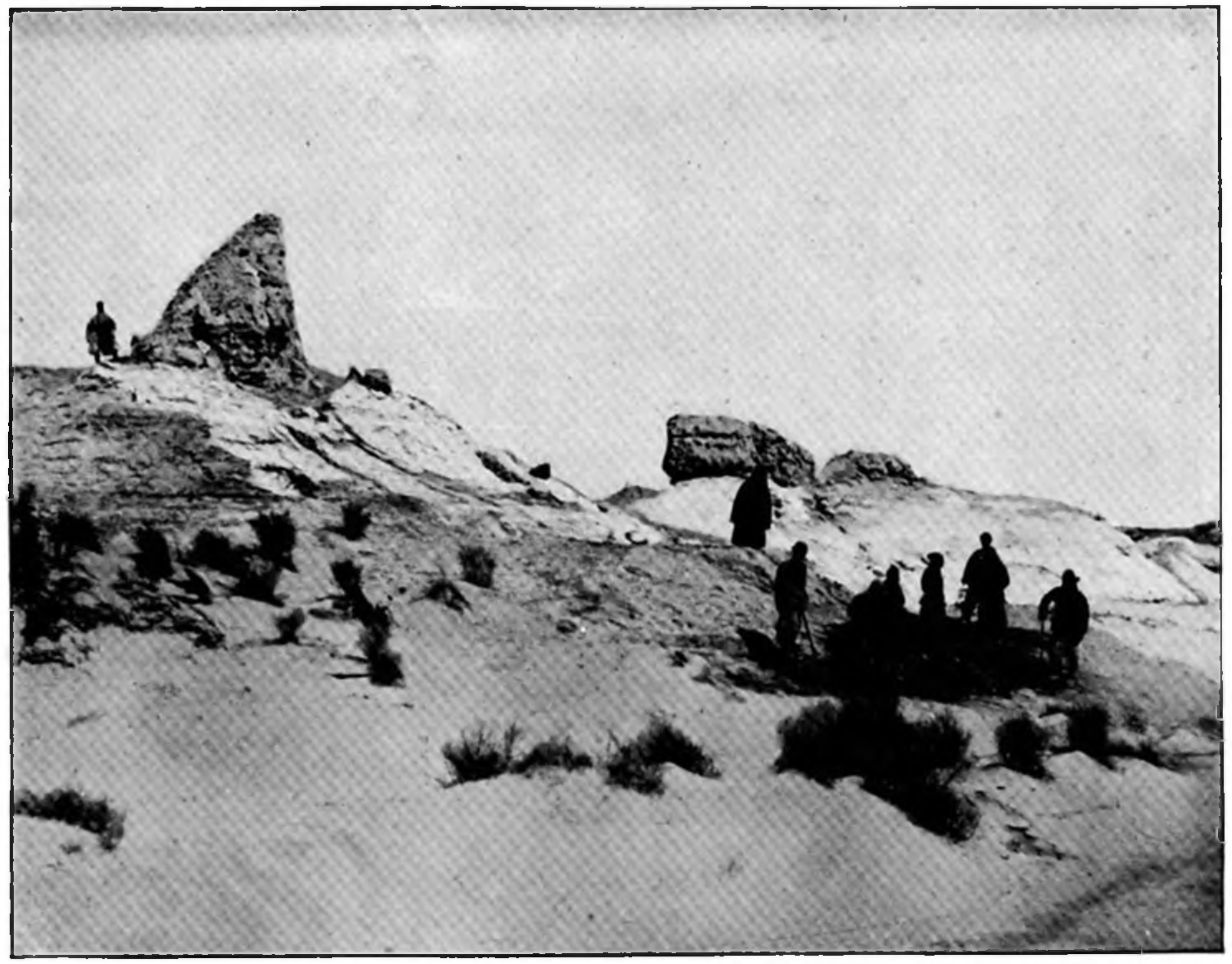


180. ANCIENT WATCH-TOWER T. XIII, WITH QUARTERS, TUN-HUANG LIMES, SEEN FROM SOUTH-EAST, AFTER EXCAVATION.

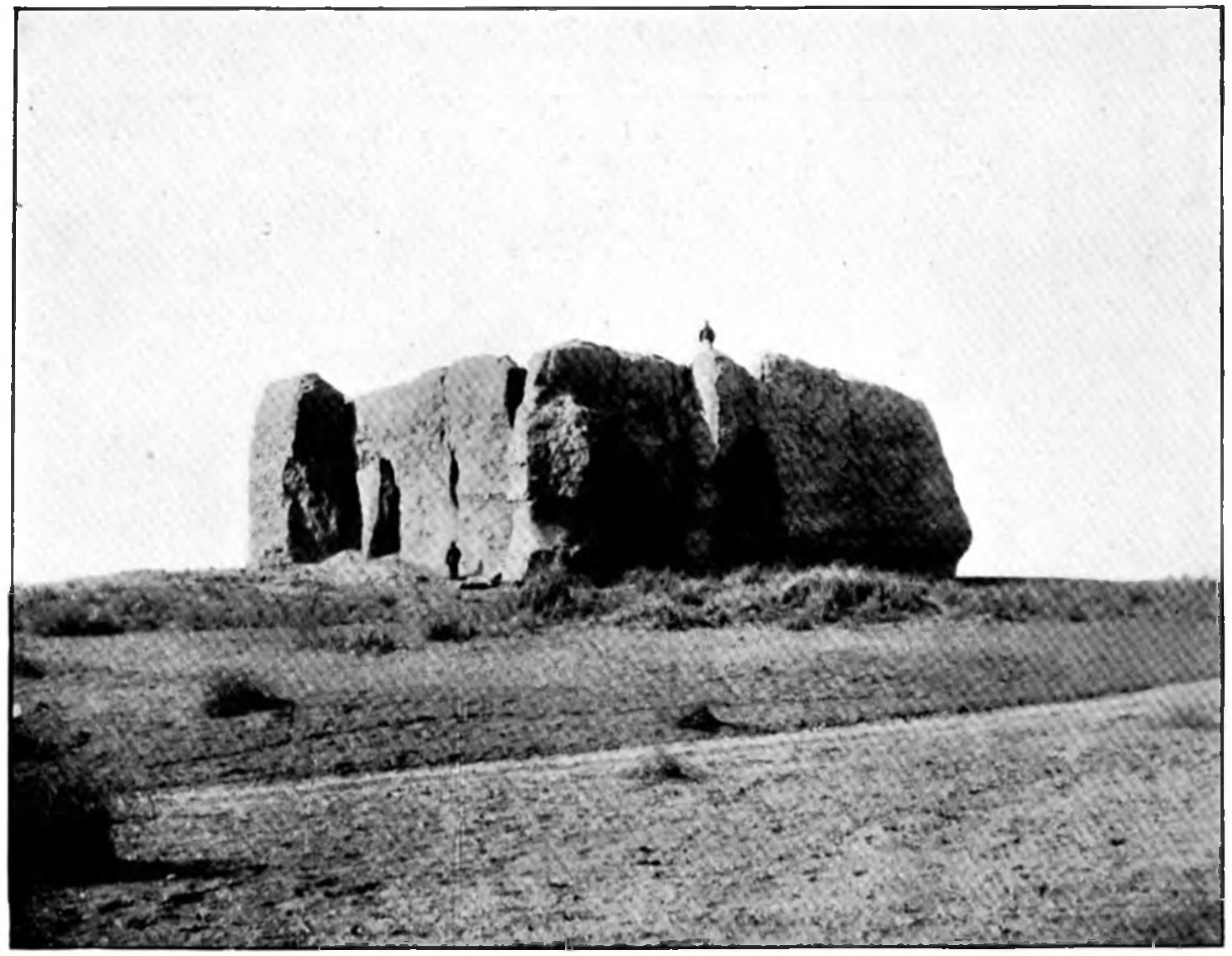
P. 684



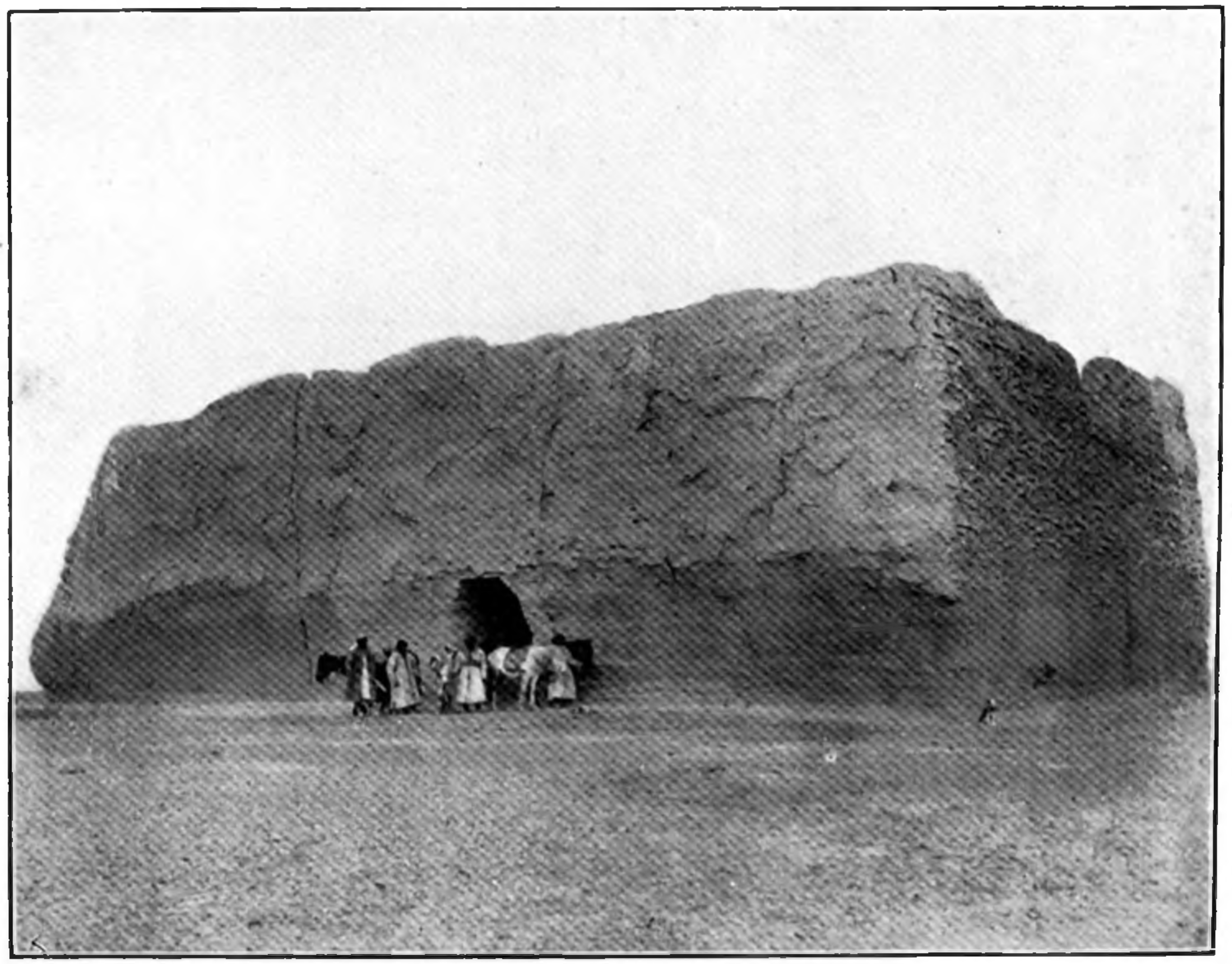
181. ANCIENT WATCH-TOWER T. XII, TUN-HUANG LIMES, SEEN FROM NORTH-WEST.



182. NORTH-WEST CORNER OF ENCLOSURE OF ANCIENT MAGAZINE T. XVIII, TUN-HUANG LIMES, WITH REFUSE HEAP IN COURSE OF CLEARING.



183. ANCIENT FORT T. XIV, AT 'JADE GATE' OF TUN-HUANG LIMES, SEEN FROM NORTH-EAST.



184. ANCIENT FORT T. XIV, AT 'JADE GATE' OF TUN-HUANG LIMES, WITH GATE THROUGH WEST WALL.

a cutting into the hard clay composing it. It proved to be the mouth of a little tunnel, about 2½ feet square in section, running horizontally into the mound and filled with drift-sand, straw, and refuse.[3] Before it was possible for me to form any view about its purpose, twenty-three Chinese slips of wood (see *Doc.* Nos. 367–88) had emerged among blank pieces of wooden stationery, grass matting, bones, and other refuse. The further part of the tunnel proved to be filled with drift-sand, and, after burrowing in for some 10 feet, the digger reported that he had reached a small apartment also full of sand. There work had to stop for the time.

Chinese documents at T. xiv. ii.

Encouraged by this unexpected discovery and the reward it had brought him, my 'prospector' continued eagerly his search of the slope, and, joined by one of my Turkī servants, before long succeeded in unearthing the remains of a platform or small apartment, T. xiv. ii, cut into the clay rock lower down and only some 16 yards off. Here close on a score of wooden records were brought to light, together with a large number of inscribed 'shavings'. One of the pieces found here, T. xiv. ii. 1, though its writing proved to be completely obliterated, had an archaeological interest of its own because it was of exactly the same shape as the Kharoṣṭhī wedge covers, with the square socket cut for the seal but no longer retaining its clay. Another piece, T. xiv. ii. 2 (*Doc.* No. 341, Plate XI), looked like an adaptation of the same shape for use as a label, and soon proved of special interest on account of the high rank of the sender it mentions. But to this, and to the import of other records contained among these first finds, I shall have to return further on.

Records suggest location of Jade Gate.

The rapid preliminary examination which Chiang Ssŭ-yeh was able to effect on the spot soon showed that, among the records discovered in the tunnel, there were several dating from Wang Mang's period (A. D. 9–19; see *Doc.* Nos. 367, 371, 372), while two of those found at ii (*Doc.* Nos. 338, 339) seemed to date from the years 48–45 B.C. But what at the outset justified particular interest in this site was that quite a number of these documents evidently referred to officers connected with the '*Yü-mên* barrier', and that several of them emanated from, or were addressed to, dignitaries of obviously higher rank than those with which the petty records of ordinary watch-stations along the Limes were usually concerned. The general topographical facts detailed at the beginning of this section, and certain archaeological observations I shall have to discuss presently, had already before made me realize that this site must have been a point of considerable importance for the western end of the Limes and the route leading along it. In fact, their evidence, combined with any indications that could be gathered from the documentary finds, soon led me to conclude that the 'Jade Gate', as it existed since the commencement of the first century B.C. down to Later Han times, had to be located at this te.

Clearing of hillock.

I was anxious, therefore, to have the remains on that unpretentious hillock cleared with all expedition and thoroughness. Fortunately, my small band of diggers received just then an opportune reinforcement in the shape of a dozen additional Chinese laboure s brought up from Tun-huang. Even thus it cost three days' continuous work to finish the task. The hillock to be cleared measured about a hundred yards from east to west, and nearly as much across. There was nothing to guide us in the search for ancient remains and refuse. So parallel trenches had to be dug all along the slopes down to the natural hard clay, which was usually hidden under detritus at a depth of 2 or 3 feet from the surface, in order to make quite sure that nothing was overlooked at this important point. The same had to be done on the fairly level top, which measured about 120 feet in either direction.

Tunnel leading to shaft.

In describing the results of these labours I may first mention the curious discovery made as regards the narrow tunnel on the north-west slope, at the mouth of which I had found that batch

[3] In the photograph, Fig. 179, the man on the extreme left is seen standing above the mouth of the tunnel. In Pl. 40 it is marked by i.

of wooden records from the time of Wang Mang. Instead of forming a kind of window to some underground chamber, as I had at first suspected, it proved to be the only access to a well or shaft measuring 6′ 4″ by 5′ 4″ in plan. It was cleared to a depth of 12 feet from the level of the tunnel without reaching the bottom. The earth roof of the shaft, which may have originally been supported by timber, fell in during the excavation, luckily without smothering any one. In the loose sand which filled the whole of the shaft there turned up dozens of wooden slips, almost all fragments so badly decayed through damp as to be illegible and to permit of handling only with the greatest care. On two of them, however, now *Doc.* Nos. 368, 369, Chiang Ssŭ-yeh was able to recognize a date of Wang Mang's reign corresponding to A.D. 17. No. 370, mentioning an officer commanding a thousand horse, also was found here. It is highly probable that all these remains of records came from some refuse-heap of Wang Mang's time and were gradually carried into the shaft by the winds which filled it up with drift-sand. As there was no hope, owing to the increasing damp, of any records or other perishable relics having survived further down, I did not sacrifice the time and labour needed for a complete clearing.

Records of A.D. 17.

Shaft probably used as dungeon.

The original purpose of this curious excavation puzzled me very much until Chiang Ssŭ-yeh and some of my Muhammadans put forward the suggestion that it may have been intended for a dungeon, the use of similar wells for the safe keeping of dangerous prisoners being still remembered in Chinese Turkestān. In the Central-Asian khanates, too, the survival of such methods of burying prisoners as it were alive is attested until the advent of Russian rule. No doubt, they could be paralleled from other parts of the East. If this explanation is right—and its correctness appears to me very probable—the narrow side opening or tunnel near the top of the well must have served as an air-hole and for admitting the prisoner, his food, etc. The fact that one of the inscribed slips recovered from the very mouth of this tunnel, T. XIV. i. 23, *Doc.*, No. 382 (Plate XII), has proved to refer to the burial of a man who had died after having been beaten recalls the horrors which this dungeon may have witnessed. It is a curious coincidence that the well-preserved wooden beating-stick, T. XIV. iii. 0018 (Plate LII), 20 inches long and of traditional Chinese shape,[3a] with a two-inch wide blade and a handle, was discovered in a refuse-heap only about 20 yards to the east of the well.

Documents dated 96–94 B.C.

It was by the side of this rubbish layer, T. XIV. iii, that one of the very scanty indications of the structures once occupying this hillock came to light. It consisted of the foundations of a brick-built wall about $2\frac{1}{2}$ feet wide and traceable for about 9 feet, with remains of steps leading up from the slope north-eastwards. The clearing of the refuse close by yielded over five dozen wooden records, some complete, of which M. Chavannes has been able to publish thirty-four (*Doc.* Nos. 304–37). Out of the six datable pieces not less than five, *Doc.* Nos. 304–6, 308, 309, belong to the years 96–94 B.C., thus conclusively proving that the occupation of this site went back to the time when the Limes was first established. One of them, *Doc.* No. 305, together with the sixth dated document, No. 307, an excellently preserved label of the year A. D. 14, will be referred to below as affording valuable evidence about the location of the 'Jade Gate'. Others, too, are of antiquarian interest. Among inscribed pieces found here I may mention also the wooden ink-seal, T. XIV. iii. 17 (Plate LIII), bearing the characters *ch'ang shou*, 'prolonged old age'. The refuse layers, T. XIV. iv, vii, found further east and partly on the slope of the hillock, were extensive, but did not prove equally rich in records and miscellaneous relics. The only clearly dated record, *Doc.* No. 355, is of the year A. D. 4. A layer of thickly-packed bundles of reeds, about 15 feet long, which was found near viii, looked as if it had served for the foundation of a wall. Remains of a brick wall could be traced for about 9 feet

[3a] Cf. the sticks carried by the gaolers in the scene from Śākyamuni's Life shown (quite in Chinese style) by the Ch'ien-fo-tung banner Ch. lv. 0011 (below, chap. XXIII. sec. iv; XXV. sec. ii; *Desert Cathay*, ii. Pl. VI).

at vi on the south-west slope, where a cutting was found to have been made into the hard clay, as at ii, evidently to accommodate some quarters.

Remains of T'ang shrine.

A particularly curious discovery was made at v, a spot about 40 feet to the south-east of the well and on the highest portion of the hillock. But for the topographical facts explaining the peculiar character of this site, it might have greatly puzzled me at the time. There, under less than a foot of gravel and earth, we found a layer of bundles of reeds about 10 feet square which evidently once had served as the foundation for the floor of a small structure. That this was of later date than the rest of the remains at T. XIV was indicated by the fact subsequently disclosed that the layer of reeds covered an ancient refuse-heap containing fragments of Han records on wood. When the layer was being cleared, there came to light ten fragments of paper leaves, evidently belonging to some Chinese Buddhist texts, T. XIV. v. a, b (*Doc.*, Nos. 710–19, Plate XXI). The paper distinctly resembled that of my manuscript finds of 1900 at Dandān-oilik, and the writing as well as the text that of the Chinese Prajñā-pāramitā translation found at Khādalik.[4] So, taking into account this evidence, I felt justified in concluding that these were relics from some modest shrine which had existed at this otherwise long-abandoned site during T'ang times. I could recognize other relics of it in a number of fragments evidently from miniature banners, T. XIV. v. 003, 0011. a–c (Plate CXVII), made up of fine silk fabrics, including damasks, with triangular tops and wooden stiffeners, such as I had found at the temple of Endere excavated on my first journey.[5]

Paper MS. of Buddhist text.

Discovery of T'ang coins.

This conclusion was strikingly confirmed when continued clearing next morning disclosed a small wooden bowl, T. XIV. v. 001 (Plate LII), embedded below the reed flooring and containing, besides two brazen hairpins, 005–006, eighty Chinese copper coins. With two exceptions, which were *Wu-chu* issues apparently of the first–second century A. D., all bore the legend *K'ai-yüan*, which we know to have been introduced in the first reign of the T'ang dynasty (A. D. 618–27) and continued through a great portion of the T'ang period.[6] These T'ang coins showed scarcely any wear resulting from circulation.[6a] So the attribution of the fragments of the Buddhist text to the early part of the T'ang period became highly probable. It was then that the route to Lop had last been an important line of communication, before the Tibetan invasion of the Kan-su marches, after the middle of the eighth century A. D., closed it to direct intercourse between China and the Tārīm Basin.

Buddhist MS. fragments of T'ang period.

What archaeological evidence had thus led me to conclude on the spot has since been fully borne out by M. Chavannes' examination of the fragments of Buddhist manuscript found at the little shrine. By a painstaking scrutiny and reconstitution of the texts found on the torn pieces of paper he has established the fact that the fragment, *Doc.* No. 710 (Plate XXI), contains the beginning of a Chinese translation of the Prajñā-pāramitā Sūtra, which is known to have been made by Hsüan-tsang between A. D. 645–64.[7] This constitutes, as M. Chavannes has duly pointed out, a *terminus a quo* for the manuscript remains of T. XIV. v, and proves that they certainly are later than A. D. 650 and probably belong to the eighth century A. D. Nine other fragments, *Doc.* Nos. 711–19, belong to a Sūtra text translated about A. D. 400 by the Indian Buddhist scholar Kumārajīva. Another larger piece, *Doc.*

[4] See above, p. 164.

[5] Cf. *Ancient Khotan*, i. pp. 429 sq.; ii. Pl. LXXVII, E. i. 016, 017.

[6] It is of interest to note that the only two other coins found at T. XIV, which came from the refuse-heaps of the hillock, are of a *Wu-chu* type attributed to the first century A.D.; see App. *B*, xv.

I may here in passing call attention to the curiously small number of coins found along the whole of the Limes west of Tun-huang; apart from the deposit at T. XIV. v, they are eight in all; see App. *B*, xv. The difference from the great number of coins picked up at the Lou-lan Site is striking. I am inclined to explain it by the fact that the surface conditions of the ground, far less affected by wind-erosion, do not make it so easy to find the coins which were lost by ancient wayfarers, etc.

[6a] See the specimen, T. XIV. v. 0010, Pl. CXL.

[7] Cf. Chavannes, *Documents chinois*, p. 152.

No. 720, refers to the dedication of a statue of S'ākyamuni and contains various Buddhist prayers and the like. The discovery here of the first-named fragment, apart from its chronological value, has an interest of its own as a fitting tribute to the memory of Hsüan-tsang; for there can be no doubt that the pious traveller on his return journey in A. D. 645 to Tun-huang must have passed within a few yards of the hillock where a relic of his devoted labours was discovered twelve and a half centuries later.

Section II.—THE POSITION OF THE YÜ-MÊN HEADQUARTERS

We shall see that the discovery of this T'ang shrine, built over the remains of a site which was abandoned in Han times, is a fact of considerable archaeological interest. But before we explain its reason it will be advisable to review the evidence to be gathered as to the character of the site both from the records and from the miscellaneous 'finds' which the ancient refuse-deposits yielded.

Miscellaneous objects from T. XIV.

I may deal with the latter first because their close agreement in type with the relics found at other stations of the Limes is obvious and renders detailed treatment unnecessary. That their number is relatively large is shown by the Descriptive List in Chapter XX, and, considering the almost total absence of structural remains, this abundance serves by itself as a proof of the importance of the site. It was not the protection afforded by heavy débris from fallen towers or walls but the extent and thickness of the refuse accumulations themselves which account for both records and miscellaneous objects having survived here in plenty. Among them it will suffice to single out for mention the numerous remains of lacquered bowls showing neat ornamentation (T. XIV. 001; ii. 001; iii. 002, 003, etc.); a painted ivory fragment, iii. 0020; an iron axe blade, 003 (Plate LIV); a piece of cane matting, iii. 0016 (Plate LIV), perhaps from a fan, and the wooden knife sheath, vii. 005. Among the plentiful fabrics, both of silk and of a variety of coarse materials, the small fragment of a finely worked silk embroidery, i. 005, is of special interest as foreshadowing a class of needlework well illustrated by later examples from the 'Thousand Buddhas' of Tun-huang.

Dated records range from 96 B. C. to A. D. 19.

Turning now to the written remains, we must note in the first place their large number. Eighty of them are included in M. Chavannes' publication, and there would be far more of them if those coming from the well of T. XIV. i had not suffered from damp and thus become undecipherable.[1] The dated documents belong mainly to two distinct periods, separated by about a century, and this chronological division approximately corresponds to the two main groups which can be distinguished among the records by their *provenance*. Among those found in the refuse layer T. XIV. iii on the top of the hillock we have no less than five (Nos. 304–6, 308, 309) which go back to the years 96–94 B.C., and thus to the time of the first establishment of the Limes beyond Tun-huang. A sixth dated document found here, No. 307, shows the year A. D. 14, marked by a *nien-hao* of the usurper Wang Mang. On the other hand, we have five documents, *Doc.* Nos. 367–9, 371, 372, with dates ranging over the years A. D. 9–19, all comprised in Wang Mang's reign, among the finds from the tunnel and well T. XIV. i. Dates intermediate between these two periods are found among the records from other refuse deposits. T. XIV. ii has furnished a fragmentary slip, No. 338, dated 48 B. C., and another, No. 339, on which Chiang Ssŭ-yeh was able to read the date 45 B. C. From T. XIV. iv comes No. 355 of the year A. D. 4, while No. 356 from T. XIV. vii probably was written in A. D. 15. It seems reasonable to conclude that the beginning of the first century B. C. and the time of Wang Mang were periods when this station received a particularly ample flow of official correspondence, representing probably also increased activity.

[1] See *Documents chinois*, pp. 71–86; Nos. 343–6, 348, 349 have not been counted, as they come from another site T. XIV. a.

If we now examine the contents of these records from T. XIV, as far as they have a local archaeological bearing, we must be struck at once by the frequency with which *Yü-mên* 玉門, the 'Jade Gate', is mentioned in them. We find its name in not less than ten documents, four times coupled with the usual designation of *kuan* 關, 'barrier' or 'pass'. In addition there are clear references to it, under the latter designation only, in two other documents.[2] The frequency of this mention of the 'Jade Gate' at T. XIV may well appear significant if we take into account that, in the total of 672 documents from the Limes published by M. Chavannes,[3] the famous frontier station is named altogether only twenty-four times. Thus nearly one-half of the records containing its name are to be found among the eighty documents which come from T. XIV. Such statistics are instructive also if we examine the local distribution of these references to *Yü-mên* at stations other than T. XIV. At T. XV. a, a point of importance to be discussed hereafter and only a little over two miles to the north of T. XIV, we find *Yü-mên* mentioned in five out of 117 published records. Still more striking is the comparison with that richest of all refuse 'archives' of the Limes, T. VI. b, where the name of *Yü-mên* is found only in *one* out of 228 pieces treated by M. Chavannes.[4] Of the remaining seven references to Yü-mên, two each occur in records from the watch-towers, T. VIII, XII. a, XIII, all three on the line of wall west of T. XIV and obviously controlled from this headquarters station. The seventh reference is in No. 343, a document found at the watch-tower T. XIV. a, the nearest to the ruined station.

Documents frequently mention *Yü-mên*.

Among the documents from T. XIV containing a mention of Yü-mên there are several which distinctly point to its location at T. XIV itself, and the contents of the rest are such as can easily be interpreted in agreement with this location. In *Doc.* No. 381 (Plate XII) we have a label or address of some letter or object evidently intended for circulation among 'the officers dependent on the military commandant (*tu-wei*) of *Yü-mên*'. The same commandant is named in the complete slip, *Doc.* No. 305 (Pl. IX), as giving an order to a certain officer 'commanding a thousand men', which sufficiently indicates the importance of his own superior charge. Distinct weight as evidence must be claimed for the well-preserved large wooden label, *Doc.* No. 307 (Plate X; see also p. 231), dated A. D. 14, which describes itself in the legend as a 'list of damaged objects in the armament of *Ta-chien-tu* at *Yü-mên*'. We have plenty of records from the Limes showing the care which was taken, just as under a modern military administration, to assure the 'return into store' of all damaged arms and equipment, partly for the sake of checking the need for fresh issues and partly with a view to eventual repairs.[5] It is obvious that such articles would be collected at the headquarters station and that this is meant here by *Yü-mên*. Considering all the circumstances, it must certainly appear to be the simplest explanation that the site where the label was found is Yü-mên itself.

Yü-mên located at T. XIV.

This conclusion is supported by the fact that we find four records from T. XIV, *Doc.*, Nos. 315–17, 378, mentioning 'the superintendent of the *Yü-mên* barrier (or simply *Yü-mên*)'. The documents, which M. Chavannes has not been able to interpret completely, do not allow us to realize the exact functions of this 'superintendent'. But the title 候 *hou* given to him and the reference to frontier officials made in connexion with him in *Doc.* No. 378 suggest that he was a dignitary of some

Officers of *Yü-mên* mentioned.

[2] For Yü-mên, see *Doc.* Nos. 305, 307, 315, 378, 380, 381; for *Yü-mên kuan*, Nos. 316, 317, 357, 379; for *kuan* alone, Nos. 367, 373.

[3] I exclude from this reckoning the lexicographical and calendar fragments grouped by M. Chavannes under Nos. 1–36.

[4] See *Doc.* No. 137 (Pl. VI). This document is of special interest. It communicates the appointment of an assistant of the *tu-wei*, or military commandant, of Yü-mên to the charge of the *Ta-chien-tu* post. We have seen above, pp. 636, 648, that *Ta-chien-tu* was probably the designation of the extreme western section of the Limes, the commandant of which also controlled the outlying watch-stations guarding the south-western flank. About the dependence of Ta-chien-tu on the command of Yü-mên, see below, p. 691.

[5] Cf. below, chap. xx. sec. vi.

(Plates XI, XII). The first was intended to introduce a certain local magistrate to the Governor, while the second gives instructions as to the particular kind of official seal to be used by the latter's deputy. The title *Ch'ien jên*, 'chief of a thousand men', which is found in several documents, Nos. 305, 375, 376 (Plates IX, XI, XII), may also be noted here, as its use for superior members of the military hierarchy established in the frontier commands of Han times is attested.[12]

Other Limes sections mentioned.

In connexion with the documentary evidence from the site of T. XIV it only remains for me to point out that its identification with the 'Jade Gate' headquarters is consistent with our knowledge of the other localities that we find mentioned besides *Yü-mên* in the records of this site. As regards *Ta-chien-tu* (or *Chien-tu*), named in *Doc.* Nos. 304, 307, 356, I have already had occasion to show that it must in all probability be identified with the westernmost section of the Limes, and that it was controlled from Yü-mên.[13] As the first-named document, No. 304, dates from 96 B.C. and the last from A.D. 15, we see that this administrative connexion was maintained for more than a century. The watch-station *Ta-fu*, named in T. XIV. iii. 64, *Doc.*, No. 309, is not mentioned elsewhere and cannot be located. We are in a better position as regards the local name *P'ing-wang* 平望, *Doc.*, Nos. 313, 314, 377, repeatedly met with also in records from other sites as the designation of a watch-station, a company, or a 'barrier'. From an examination further on of these records, more definite than those from T. XIV, we shall see that the name was probably borne by the section of the wall extending from T. XXII. c, on the Khara-nōr, to T. XIV. a, where it joined the 'Yü-mên barrier'.[13a]

Advantages of 'Jade Gate' placed at T. XIV.

If we review the conclusions arrived at by the detailed scrutiny of the records from T. XIV, and join with them what our preceding survey of the natural advantages of the site and its topographical setting has shown us, it is easy to realize that, for the period covered by the extant dated remains of the Limes, the position of the 'Jade Gate', the chief frontier station through which all traffic westwards by the ancient Lou-lan route had to pass, may now safely be fixed at T. XIV. Well withdrawn behind the defensive line of wall and watch-towers, and protected besides from direct attack by impassable marshes to the north-west and south-east, the position was admirably adapted to serve as a *point d'appui* for the posts along the most advanced section of the Limes. It was equally well chosen as a head station for controlling traffic by the route which, from the reign of the Emperor Wu-ti down to the close of the Former Han dynasty, was certainly the main link between the Chinese empire and its Central-Asian 'sphere of influence'. Fortunately an archaeological discovery made on this ground permits us to clinch the argument, while at the same time illustrating once again the accuracy of Chinese historical records.

Secondary wall line passing T. XIV.

I refer to the discovery of a secondary line of wall which, on my first reconnaissance from the site, I found to extend from the north towards the ruined fort of T. XIV and, passing it quite close on the west, to continue to the south-south-east approximately in the direction of Nan-hu. Closer examination of the portion lying north of T. XIV showed that this wall was only about 5 feet wide at its foot, but otherwise in construction closely resembled the Limes wall, showing the identical alternation of layers of fascines and stamped clay. Badly decayed as it was in most places, the marked difference in thickness could yet be observed with certainty throughout its traced extent, and this suffices to distinguish it clearly from the Limes wall proper. The line of this secondary wall starts from the south-western edge of a deep marshy depression which lies to the south of the Limes stations T. XV and T. XV. a, and contains several spring-fed lakelets. For about half a mile it runs due south across the bare gravel-covered top of a tongue-like plateau, and though its remains are nowhere more than 4 or 5 feet in height, the reed fascines used in it are clearly traceable

[12] Cf. Chavannes, *Documents*, p. 72. [13] Cf. above, pp. 636, 648. [13a] Cf. below, pp. 698 sq., 717.

a distance of about 9 yards to the east of the wall, except where it was seen to turn off towards the ruined tower as it neared it, thus furnishing definite evidence of contemporary origin.[15]

Section III.—THE WALL BETWEEN YÜ-MÊN AND YANG KUAN

Transverse wall of later origin.

Before we consider the important bearing which the discovery of this transverse wall has upon the location of the Jade Gate, we must endeavour to arrive at a clear perception of its original purpose and its chronological relation to the main line of the Limes. Taking the latter question first, it appears to me certain that the construction of the transverse wall can neither have preceded, nor have been contemporary with, the extension of the main line of the Limes to this ground. In the first place, it is highly improbable that those who under the Emperor Wu-ti, in order to assure safe access to the Tārīm Basin, pushed forward the fortified line in a few years over a vast distance and in the face of formidable natural difficulties, should have been satisfied here with a wall of far less strength than that which, as my explorations further east both in 1907 and 1914 have proved, was maintained by them continuously across hundreds of miles of desert. Nor could this wall have been built as an independent and earlier barrier to watch the route from the west—even if such could have been a main object of the Chinese authorities in those times of a vigorous 'forward policy'; for in this position at T. xiv it would have been quite easy to turn it from the north flank as long as the main wall did not exist to afford protection on that side. If such had been the object of the transverse wall, we ought to expect its northern end to abut upon the marshes near T. xvii or T. xviii, which, together with those towards the Khara-nōr, would have made its flank quite safe, while the length of the line would have remained practically the same. Thus we are obliged to recognize in it a work of later date than the main line of the Limes.

Purpose of transverse wall line.

But what was the true object of this later cross-wall ? Two explanations seem possible. At first sight the idea suggests itself of an inner line built not primarily for increased military defence, but chiefly for purposes of police control, in order to watch effectively the coming and going of individual travellers and caravans, to levy duties, and in particular to keep the administrative area of the empire clear of the incursions of troublesome 'barbarian' visitors from the protected territories beyond. It would be easy to find analogies for such an inner cordon line both in the organization of the lines of the Roman Limes and on modern frontiers in the East.[1] It is obvious that such a cordon might have been organized side by side with the maintenance beyond it of a strong line for military defence such as the main Limes wall, well secured at its extreme western flank, was undoubtedly intended to be. But in the light of a chronological fact revealed by the documents another explanation claims attention, and there are topographical observations which

[15] Another curious observation, and a more puzzling one, may also find record here. From about half a mile to the south-south-east of the fort of T. xiv to beyond the newly discovered tower I noticed a low earth embankment, about 3 feet wide at the bottom and about 1½ feet high, running parallel to the wall, outside, i.e. to the west of it, and at the regular distance of 50 yards. Its purpose remains obscure for the present, and I did not observe a corresponding feature along the Limes wall proper. Could it possibly have been intended to mark the exact limit of the administrative border, as has been assumed, I believe, of the small ditch traced outside the wall on certain lines of the Limes of the Roman Empire?

[1] For an interesting parallel furnished by the lines of Hadrian's Limes in Pannonia, Dacia, Dobrucha, etc., cf. Prof. E. Kornemann's illuminating survey, *Die neueste Limesforschung*, *Klio*, 1907, pp. 97 sq., 104 sqq., and *passim*. Many problems like the one discussed above, but often far more complicated, must engage the attention of scholars concerned with the study of Roman Limites.

Among modern parallels it may suffice to mention the line held on the Indian North-West Frontier by the Military Border Police posts. It runs well behind the true Limes represented by the advanced routes and passes which are guarded by the various Frontier Militia Corps of the Khyber, the Kurram Valley, Wazīristān, etc.

distinctly seem to support it. If the cross wall is of later date, as we have shown reason to believe, it may well have been constructed with the purpose of reducing the length of the border-line that had to be guarded across desert ground. A glance at the map is sufficient to demonstrate the advantage of such a reduction.[2]

Limes retrenched early in first cent. A.D.

Now it is certainly important to note that, while east of the transverse line the dated records brought to light on the Limes prove occupation of its watch-stations from the beginning of the first century B.C. down to A.D. 137, the still more numerous datable records found west of it, with two apparent exceptions, stop short with the time of Wang Mang, and in the case of the outlying stations on the south-west flank, T. IV. b–VI. d, with dates considerably earlier.[3] This fact seems strongly to favour the presumption that a gradual retrenchment of the border-line lying westwards of T. XIV may have set in during the troubled times of Wang Mang's usurpation or soon after. The abandonment of the outlying westernmost portion of the Limes was bound to effect a considerable reduction in the difficulties about victualling, garrisoning, etc., which must always have been felt most in the case of posts pushed out into the desert far away from the inhabited bases. If due attention is paid to the topographical factors, it appears probable that such a retrenchment would necessarily have commenced from the side of the outlying line of watch-stations on the south-western flank, away from the Lou-lan route. The posts along this route may have still been occupied during a portion at least of Wang Mang's reign, as proved by T. VIII. ii. 2, *Doc.*, No. 585, dated A.D. 8, and No. 586. In the case of T. XII, XII. a, which, as has been shown above, formed very convenient advanced watch-posts for the 'Jade Gate',[4] occupation is likely to have been continued even somewhat later.

Transverse wall needed after retrenchment.

As soon as the line of watch-stations guarding the south-western flank was abandoned, the need must have made itself strongly felt for another line, also drawn across the desert but further back, which would render the crossing of the 'administrative frontier' of the empire—to use the term of Anglo-Indian official language—impossible, whether for marauding bands or for unauthorized persons in general. It is at that time and in the circumstances just mentioned that I think the construction of the transverse wall from T. XIV to Nan-hu or *Yang kuan* would best be accounted for. Without it, access to Tun-huang would have lain open for any party which might have avoided the stations still guarded along the Lou-lan route by moving round the terminal marshes of the Su-lo Ho, or have crossed the route beyond the last station still occupied. But what was of even more immediate moment is the obvious fact that without such protection the important line of

[2] The distance from the northern end of the tranverse wall to the northernmost point of modern (though now abandoned) cultivation in the Nan-hu area is about 24 miles by the map. From the same point the distance along the line of watch-stations as far as T. VI. d is more than twice as long.

[3] The total number of exactly dated documents, or of those for which an approximate chronological limit can be fixed, is thirty-two in the case of the stations from T. XIV to T. XXII. c. The earliest among them is T. XXII. c, *Doc.*, No. 271, of 98 B.C.; the latest, T. XV. a. i. 6, *Doc.*, No. 536, dated A.D. 137.

Taking the stations from T. VI. c to T. XIII, we have a total of forty-four datable documents, counting *Doc.* Nos. 9–24 and 25–35, which contain portions of calendars for the years 63 and 59 B.C. respectively, as one document in each case. The earliest in the series is T. IV. b. ii. 1, *Doc.*, No. 430, of 94 B.C., or, if another possible reading were adopted, T. VI. b. ii. 6, No. 255, of 68 B.C.; the latest, T. XII. a. 3, No. 592, dated A.D. 21.

Of the two apparent exceptions referred to in the text above, T. XIV. a. i. 1, No. 390, bearing the date of A.D. 87, comes from a watch-tower which closely adjoins and overlooks T. XV. a. Though slightly west of the transverse line, it certainly had to be guarded as long as the latter important station was occupied; see below, pp. 697, 708 sq. In the case of T. XI. ii. 6, No. 680, we have the fragment of a calendar the date of which, A.D. 153, has been inferentially calculated by M. Chavannes on the conjectural assumption that another slip, T. XI. ii. 8, No. 8, found in the same place, belongs to a supplement to a lexicographical text composed in 48–33 B.C. For our purposes it is enough to remember that T. XI was a roadside station which is proved by archaeological evidence to have been used as a halting-place by passing travellers down to Sung times, if not later; see above, p. 667.

[4] Cf. above, pp. 670, 679 sq.

communication which linked the headquarters at T. XIV, i.e., as I assume, the Jade Gate, as well as the stations further east, with the nearest inhabited area at Nan-hu, or *Yang kuan*, would have been completely exposed.

Retrenchment due to Hun troubles.

In the absence of direct documentary evidence the explanation here offered cannot be considered as definitely proved. But it appears to me strongly supported, not only by all topographical facts but also by any historical information that the Chinese Annals furnish for this period. This retrenchment of the westernmost frontier line of the empire towards the end of Wang Mang's reign or very soon after would have been fully in keeping with a well-attested contemporary change in Chinese policy. Serious trouble had arisen about A.D. 9 with the Hsiung-nu, or Huns, through Wang Mang's action towards the *Shan-yü*, their paramount chief, and disorders broke out in the 'Western Regions', which the Chinese were unable to protect adequately against Hun raids from the north.[5] After A.D. 16, the Former Han Annals tell us, the Hsiung-nu 'made a grand attack on the northern border; while the Western Regions were broken up and scattered like loose tiles'. We are informed also that 'some years later (A.D. 23), when Wang Mang was dead', the authority of the Chinese Governor-General of the Western Regions 'was annihilated, and the power of China in the Western Regions was at a minimum'.[6]

Passive frontier defence during first cent. A.D.

After the accession of the Later Han dynasty in A.D. 25 these conditions continued. As the *Hou Han shu* clearly states, the Western Regions during the first two reigns were allowed to remain under the power of the Huns, who during the period A.D. 58–75 even succeeded in making inroads into four commands of *Ho-hsi*, including Tun-huang and westernmost Kan-su.[7] It is certain that, during the half-century following Wang Mang's death, Chinese policy was no longer concerned about imperial expansion westwards, but, until the last quarter of the first century A.D., kept strictly on the defensive. The statements of the Later Han Annals are very precise on this point, and they afford additional justification for the belief that the retrenchment of the line of the Limes, which I assume to be represented by the transverse wall passing outside T. XIV, took place shortly before or during that period of passive defence on the westernmost frontier.

Jade Gate retained at T. XIV.

In the light which the topographical and historical facts just discussed shed upon the character and origin of this transverse wall, it is easy to realize that the direction of its line just towards T. XIV distinctly confirms the location there of the Jade Gate. By adopting this alignment for the new wall it was possible to retain the traditional site of the Yü-mên headquarters, and with it also the natural advantages of position for which it had originally been chosen. Equally important probably was another consideration. From the very beginning, when the western frontier of the empire was extended to the region of Tun-huang, we find the two 'barriers' of *Yü-mên* and *Yang* always mentioned in close conjunction by the Annals of both Han dynasties.[8] There can be no doubt that the frontier troops stationed there were meant to offer mutual support. We have seen above that the 'Yang barrier' must be located at the present Nan-hu, and that the Jade Gate was certainly situated to the north-west of it and on the line defended by the main wall and watch-stations

[5] Cf. Chavannes, *T'oung-pao*, 1907, p. 155, note 2; Wylie, *J. Anthrop. Inst.*, xi. p. 111.

[6] Cf. Wylie, *J. Anthrop. Inst.*, xi. p. 112. M. Chavannes, *Documents*, p. vii, seems to find some contradiction between the above statements of the Former Han Annals and the evidence of our contemporary records from the Limes. But the increased activity of the Chinese frontier guards beyond Tun-huang, which these records undoubtedly prove, is fully reconcilable with the decay of Chinese authority in the Tārīm Basin and the renewed pressure exercised by the Hun neighbours in the North. In reality, the latter facts account for the former.

[7] Cf. Chavannes, *T'oung-pao*, 1907, pp. 155 sqq. It was not until A.D. 73 that the first step of an offensive westwards was taken by the Chinese occupation of Hāmi. It was then that the Western Countries are stated to have first entered again into relations with the Chinese empire after an interruption of sixty-five years (A.D. 9–73).

[8] Cf. Wylie, *J. Anthrop. Inst.*, x. pp. 21 sq.; Chavannes, *T'oung-pao*, 1907, p. 169.

of the Limes.[8a] There is on this line no ruined site nearer to the extreme end of Nan-hu cultivation than T. XIV, and none more suited for a main frontier station. From the first establishment of the Limes a much-frequented road must have connected the two important headquarters, and obviously it was a natural and advantageous course to construct the new wall along this very road. The way in which the lines of the Roman Limes were originally made to follow in most cases earlier routes of importance furnishes an exact analogy,[9] and the same is illustrated also by the alignment of our Tun-huang Limes itself, which keeps along the Lou-lan route. Thus, by taking their new wall to the time-honoured site of the Jade Gate, those who substituted it, I believe, for the westernmost section of the Limes early in the first century A.D. were able to satisfy at the same time the exigencies of a changed frontier policy, practical convenience, and respect for tradition.

Road connecting *Yü-mên* and *Yang kuan*.

Local worship continued at Jade Gate.

It is the last-named motive, always strong in Chinese character, which also explains the previously described discovery of remains of a Buddhist shrine belonging to T'ang times on the débris-covered hillock of T. XIV abandoned centuries earlier. Since we can now safely identify the site as that of the ancient Jade Gate, we have no difficulty whatsoever in recognizing here a clear case of continuity of local worship. With the renewed assertion of Chinese power in the Western Regions, which reached its fullest development through Pan Ch'ao's glorious exploits during the period A.D. 73–102,[10] the danger of Hun raids upon the administrative border of China had receded. With the subsequent migration of the Huns westwards it disappeared altogether. Already, from about the middle of the second century A.D., the relations of the Chinese empire with the 'Western Kingdoms' had become more and more restricted;[11] after the end of the Later Han dynasty and the division of the empire they seem for a time to have ceased altogether. Judging from the total absence of records later than the middle of the second century A.D. in the ruined stations explored by me, the whole line of the Limes west of Tun-huang appears to have been soon after abandoned to the desert.

Limes posts abandoned in second cent. A.D.

Traffic continued along westernmost Limes.

But, as proved by the documents of the third and fourth centuries found at the Lou-lan Site and by Fa-hsien's journey about A.D. 400,[12] caravans still continued to use the desert route to Lop. Nor is there reason to doubt that wandering herdsmen, woodcutters, and the like from the Tun-huang and Nan-hu oases still visited the grazing along the lakes and marshes of the terminal Su-lo Ho, just as they do at the present time. So local worship had a chance here of proving its tenacity once more. It clung to the site where those leaving the Jade Gate of the Han times for the difficult desert journey to Lou-lan had of old been accustomed to put up ex-votos at the border shrine and pray for a safe return 'within the barrier' of the empire, just as Chinese travellers do now at Chia-yü kuan, the modern equivalent of the Jade Gate on the extant 'Great Wall' of China.[13]

Modern shrine proving local worship.

Here, at the site of the Jade Gate of Han times, I was fortunate enough to find the survival of that old tradition to the present day attested in most conclusive fashion by a small modern shrine which lay in ruins on a knoll only about a hundred yards to the west of the hillock explored. While the walls still stood to a fair height, the roof and all woodwork had disappeared. The coarsely made clay images were badly broken, perhaps the act of some truculent Tungans, but in front of them there were still to be found incense sticks placed in small sand-filled trays and similar marks of recent worship. There was thus tangible evidence that herdsmen and occasional Chinese wayfarers even now offered prayers at the ruin, and superstitious fear would not allow my own labourers

[8a] Cf. above, pp. 620 sqq.

[9] Cf. Kornemann, *Die neueste Limesforschung*, *Klio*, 1907, pp. 76 sq., and the publications quoted there.

[10] Cf. M. Chavannes' extracts from the Later Han Annals, *T'oung-pao*, 1906, pp. 218–43; 1907, pp. 156 sqq.

[11] Cf. Chavannes, *T'oung-pao*, 1907, pp. 167 sq.

[12] Cf. above, pp. 408 sq., 558.

[13] See above, p. 602; below, chap. XXVII. sec. i.

to dig even near it. I could not feel altogether sorry for this, as continued veneration of the spot seemed in itself an additional archaeological proof for the identification that I have now been able to record in detail.

Section IV.—T. xiv. a AND THE REFUSE-HEAPS OF T. xv. a

From the site of the Jade Gate now determined we may return to the line of wall and watch-towers and resume its survey from the point where we left it by the side of the great marshy depression to the north-west of T. xiv. Beyond this, I found the wall reappearing on the north-eastern edge of the marsh and continued in the direction from south-west to north-east across a projecting tongue of the gravel-covered plateau to the edge of a smaller depression which contained a winding lakelet, seen in Fig. 189. Along this section, about three-quarters of a mile in length, I could trace no remains of a tower or station, but the wall, built with reed fascines in the usual fashion, still rose in places to 5 or 6 feet in height. Where it descended towards the edge of the marsh on either side of the plateau, it had decayed into a low mound of earth, which could be distinguished only by its straightness amidst the scrub and reeds fringing the open sheets of water. On the north-east the traces of the wall stopped short at about 40 yards' distance from the small salt lake and about 15 feet above its level at the time. To the south-west, in the wide depression, I found the earth mound extending for about a quarter of a mile from the foot of the plateau to where the soil became actually boggy. Limes wall N.W. of T. xiv.

The salt lakelet just referred to is separated from a much longer depression eastwards by another narrow tongue or ridge of clay which further north breaks up into a large cluster of eroded terraces. Fig. 187 shows these as seen from the south, together with the tower T. xiv. a perched on the ridge to the right. The wall crosses this ridge where it narrows to a neck only about 400 yards wide. On the south-west the wall, with its layers of reeds still quite distinct though curiously contorted in places, as Fig. 189 shows, descends the steep slope of the ridge to its base, some 60 feet lower, and could be traced to within about 100 yards of the shore of the lake. The level of the lake was then about 20 feet lower, but a further stretch of wall, decayed here into a mere low mound, may well be covered by the thick scrub. To the north-east the wall runs down to the gravel-covered edge of the winding basin already mentioned, and was traceable over this to within about 150 yards of the limit of the nearest marsh as marked by a recent crust of salt-cake fringing open water. The traces of the wall ended about 12 feet above the water's level. The view in Fig. 188, taken from near the tower T. xiv. a, shows a portion of this marsh-basin where it extends to the north. It is a characteristic glimpse of the desolate landscape past which the Su-lo Ho runs its terminal course westwards. The bed of the river forms a deep-cut fosse, quite distinct from the marshes that I have described from T. x onwards. It is so well hidden from view that on my first reconnaissance from T. xiv. a I completely failed to realize its existence, though approaching it to within a mile or so. Clay ridge bearing tower T. xiv. a.

The tower T. xiv. a was situated about 50 yards from the western slope of the ridge and, though much decayed, still rose to about 15 feet in height. Its base (Plate 39) measured close on 24 feet square. The brickwork showed close resemblance to that in the towers T. xii, T. xii. a, T. xiii, with layers of reeds after every fourth course. On the top of the tower were remains of a small conning room, about 8 feet square, in which the curious wooden hoe, T. xiv. a. ii. 001 (Plate LII), was found. From a small apartment adjoining the east foot of the tower came the interesting clay sealing, T. xiv. a. i. 001 (Plate LIII), with four Chinese characters in angular seal writing, which have been read by Mr. Hopkins as *Tung pao yin-hsin* 董褒印信 'seal of the Remains of watch-tower T. xiv. a.

Tung frontier district'. The locality named here still awaits identification. The preservation of this clay sealing is obviously due to the burning of the wooden seal-case which once had contained it. The remains of the wall near which it was discovered also bore marks of having been exposed to fire. Among the objects recovered from the refuse close to the quarters, a well-preserved string shoe, T. XIV. a. 001, and a woven string sandal, 002 (Plate LIV), of special make may be mentioned.

Records found at T. XIV. a.

One of the two wooden slips found in the room T. XIV. a. i, *Doc.*, No. 390 (Plate XII), bears evidence of the date A. D. 87. It furnishes a receipt for a certain payment made to the commander of a post belonging to the western section of *P'ing-wang*, and thus seems to indicate that this watch-tower T. XIV. a was included in P'ing-wang. I have already had occasion to note that, judging from the position of the several stations where documents mentioning this local name were found, it appears to have been applied to that part of the Limes which extended from T. XXII. c on the shore of Khara-nōr to the neighbourhood of T. XIV. a, the latter probably marking its westernmost point.[1] Of the wooden records found in the watch-place on the top of the tower, *Doc.* Nos. 343–6, 348, 349, the first preserves a mention of Yü-mên, while among the rest are fragments of private correspondence apparently exchanged between exiles posted on this border.[2]

Discovery of station T. XV. a.

Beyond the winding marsh-basin to the east of T. XIV. a the remains of the wall were at first difficult to trace. It ran here for about 1½ miles across scrub-covered low ground broken by numerous small clay terraces, of the usual lacustrine origin, and in most places was badly decayed. The alignment of the wall was, however, here clearly marked by the towers T. XIV. a and T. XV at its ends, both easy to sight owing to the high ground they occupied. No ruins of a tower intermediate between the marsh and T. XV could be traced, and, but for the keen eyes and intelligence of my Yārkandī follower Tila Bai, the scanty surface remains of an important station, T. XV. a, once established near by, might easily have escaped me. They proved to be extensive refuse-heaps that covered the gravel slopes of a narrow terrace situated about a quarter of a mile to the south of the line of the wall and close to where it abutted on the spring-fed marsh north-east of T. XIV. a. The terrace, stretching for about 200 yards from east to west (see Plate 40), showed no structural remains whatsoever. But at the south-west end of its flat top (marked i in plan) there was seen a slight swelling, only about 2 feet high and about 40 feet across. On excavation it was found to consist of refuse and completely decayed brickwork, hiding the remnant of a wall about 5 feet long and 2 feet 8 inches thick. The size of the sun-dried bricks was 14″ × 7″ × 4″, approximately the same as that usual in the towers of the Limes.

Transverse wall aligned upon T. XV. a.

Before describing the abundant finds which two days' clearing brought to light here and from the extensive rubbish layers discovered lower down, especially on the slopes to the west, I may call attention to the fact that the transverse wall discussed in the preceding sections, coming from T. XIV, is aligned upon the ruined station T. XV. a marked by these refuse accumulations. The point which it reaches on the south-west shore of the marsh was found to lie about a mile due south of that occupied by T. XV. a on the north-east shore. But, owing to the depth of open water and reedy marsh intervening, a detour of nearly 3 miles had to be made in order to get from one point to the other. This alignment of the transverse wall creates the presumption that, at the later period when it was built, there was still an intention of retaining the position of T. XV. a within the guarded line. We shall see that the prolonged period of occupation proved for T. XV. a by its dated records is in full agreement with this.

But even without such documentary evidence it would have been easy to realize that the Limes

[1] Cf. above, p. 691; also Chavannes, *Documents*, Nos. 271, 274, 275, 313, 314, 377, 484, 592, 662, 693.

[2] The documents above named have by an oversight been classed, *Documents*, pp. 78 sqq., with finds from T. XIV.

station—for as such it could safely be recognized notwithstanding the almost total disappearance of structural remains—must have been occupied for a great number of years; so extensive, and in places deep, were the rubbish accumulations. To the west of the débris first discovered the scraping of the slope from about 10 to 20 feet below the top of the terrace revealed refuse lying to a maximum depth of 5-6 feet. At this place, marked T. xv. a. ii, most of it consisted of brick débris, ashes, and reed straw. But, just as at i, there were found plentiful Chinese records on wood mixed up with it. Almost as abundant were the documents extracted from another refuse layer, T. xv. a. iii, covering the slope about 20 yards north of ii over an area of about 60 by 30 feet. On lower ground westwards, and at about 50 yards distance from ii and iii respectively, were traced two smaller refuse-heaps, v and vi, while yet another, iv, was discovered near the southern edge of the terrace some 25 yards from i. Further to the east, on the level top of the terrace, there survived two stacks of fascines of the usual type to a height of 2 or 3 feet. The one further south (see Plate 40) was in part reduced to a slag-heap still showing calcined reeds. Some 40 yards off eastwards there rose a third stack. Refuse deposits of T. xv. a.

As three at least of these rubbish deposits can be proved by documents to date from successive and well-defined periods, it will be convenient to deal first with the written records they yielded and subsequently with the miscellaneous and presumably contemporary relics found with them. The refuse-heap of T. xv. a. iii manifestly represents the earliest deposit; for among the thirty-six documents from it included in M. Chavannes' publication all those which are datable belong to the Former Han period. In *Doc.* No. 446 the date 53 B.C. is quite certain; in No. 447 that of 61 B.C. is probable. Of No. 449 M. Chavannes has demonstrated that the names by which the various commands of westernmost Kan-su from Lan-chou to Tun-huang are mentioned point distinctly to the closing years of the Former Han dynasty. Three records, Nos. 463, 464, 470, refer to the *I-ch'iu* 宜秋 company, and, as we find it named in five more documents from T. xv. a (Nos. 482, 486, 535, 536, 541) and nowhere else, it can be safely concluded that this company provided the garrison of the station for most, if not the whole, of the time during which it was occupied. In certain documents from T. xv. a. ii (Nos. 482, 484, 485) the names of three other companies occur in connexion with payments made by individual men, etc. But none of these companies are mentioned again elsewhere, except that of *Chu-chüeh* 朱爵, which, both in T. xv. a. ii. 9, *Doc.*, No. 484, and in No. 693 (T. XIX. i. 6), is described as belonging to P'ing-wang. We have seen that this section of the Limes probably extended from near the Khara-nōr to T. XIV. a.[3] Dated records from T. xv. a. iii

The reference made to *Yü-mên* in Nos. 451, 458, 459 would be sufficiently accounted for by the vicinity of that important frontier headquarters at T. XIV. But a record from T. xv. a. i, *Doc.*, No. 536 (Plate XVI), containing a circular order dated in A.D. 137, distinctly implies that the station T. xv. a and the I-ch'iu company were without doubt at that time subordinate to Yü-mên. We have a record of intermediate date pointing to the same conclusion in T. xv. a. ii. 22, *Doc.*, No. 483 (Plate XIV), which conveys an order from the 'commandant of the fortress of Yü-mên' and is dated A.D. 43. Another and otherwise unknown locality, 'the fortified post of Yü-ch'ang-lo', is referred to in T. xv. a. iii. 43, *Doc.*, No. 452 (Plate XIII), and deserves notice here in view of a topographical surmise to be discussed below. The document authorizes a certain person to proceed to Chien-tu, taking the camel provided for the official use of the *wei-shih*, a subordinate officer, at Yü-ch'ang-lo, and drawing three daily food-rations for the journey. Chien-tu, or Ta-chien-tu as it is usually designated, has already been located at the extreme western end of the Limes wall.[4] The distance to that point, i.e. T. IV, from T. xv. a is only about 32 miles, easily covered by two daily marches, and T. XI offers a convenient intermediate halting-place. The Document referring to Jade Gate. Post of *Yü-ch'ang-lo.*

[3] See above, pp. 691, 698. [4] Cf. above, pp. 636, 648.

fortified post of Yü-ch'ang-lo must thus have lain one march beyond T. xv. a. But where? We can hardly expect to find it on the Limes, as we could not in that case account for the document being discovered at the station T. xv. a, which itself lay far off from the direct route connecting the westernmost portion of the Limes with the eastern sections beyond T. xiv, or the Jade Gate. We shall have to recur to this interesting minor question.

Dated documents from T. xv. a. ii (A.D. 15–56.)

Next in chronological order are the contents of the refuse-heap T. xv. a. ii, where the dated records range from the reign of Wang Mang (A.D. 9–23) to the middle of the first century A.D.[4a] The oldest is *Doc.* No. 482 (Plate XIV) of A.D. 15. No. 490 is also attributed by M. Chavannes with great probability to the time of Wang Mang. Then follow Nos. 483–6 with the dates A.D. 43, 46, 55, 56 respectively. The slip No. 487 is of interest because it is addressed to 'the commander of the posts of the western section', who is supplied with a list of men and dogs on guard requiring to be fed. It appears very probable that the western section of *P'ing-wang*, already referred to in connexion with No. 390 from the neighbouring watch-tower T. xiv. a,[5] is meant here, and that the office of this section was stationed at T. xv. a, but unfortunately the name of the locality is not stated. The mention of the sub-prefecture of *Lung-lo*, in No. 488, and of the governor of Tun-huang, in No. 497, does not help us on this topographical point, but anyhow suggests that this station had official relations more extended than those of a simple watch-post on the line of wall. From this refuse-heap, T. xv. a. ii, came also the curious collection of medical recipes and case reports written on bamboo slips of uniform size and shape, Nos. 524–34, which M. Chavannes has fully analysed,[6] and the small silk envelope, No. 503 (Plate XIV), bearing the name of the addressee and sender. Judging from its size, the letter it once contained must, as M. Chavannes has rightly pointed out, have been folded up into a little roll just as the letter on paper, L.A. II. i. 1, *Doc.*, No. 904 (Plate XXVIII), found at the station of Lou-lan. But, as the clearly defined period to which the refuse accumulations of T. xv. a. ii belong precedes the invention of paper (A.D. 105) by about half a century, it appears to me almost certain that the letter in this case was itself written on silk.

Medical recipes and reports.

Records from refuse-heap T. xv. a. i (A.D. 97–137).

The latest of the refuse-heaps of this station is T. xv. a. i, which was found on the highest edge of the terrace mixed up with the scanty débris of any structural remains that could be traced there. Records thus recovered from the ruin itself are obviously such as found a resting-place there during the latest occupation of the station. It is in striking accord with this archaeological indication that the dated documents from T. xv. a. i are all later than those from refuse on the slopes below (ii, iii). We find the dates A. D. 67 and 137 definitely stated in the records, *Doc.* Nos. 535 and 536 respectively,[6a] already referred to on account of their other contents. No. 537 (Plate XV) is the fragment of a calendar for a year which M. Chavannes has succeeded in definitely identifying as A. D. 94. The fragment of a letter on paper, *Doc.* No. 707 (Plate XX), proves by its very material that it must have been written some time after A. D. 105. An observation made above as regards the official relations with *Lung-lo* is confirmed here by the tablet No. 540 (Plate XV), which directly emanates from that sub-prefecture and by its deferential wording appears to indicate that the officer addressed was one of some consequence.

Silk strip with Chinese inscription.

But of greater antiquarian importance for us are the two silk strips, T. xv. a. i. 3, *Doc.*, No. 539 (Plate XV), found together and originally belonging to the same piece of undyed creamy silk. One of them bears the ink impression of a Chinese seal and, by retaining the selvedge at

[4a] It is of interest to find the dating of this refuse deposit confirmed by the fragment of a knife-shaped coin, T. xv. a. ii. 69, which M. Chavannes, *Doc.* No. 709 (Pl. XX), has described, and which is attributed to an issue of Wang Mang.

[5] See above, p. 698.

[6] The slip No. 524, T. xv. a. iii. 42, evidently had found its way to the rubbish-heap northward by some chance, or else had been erroneously marked by me.

[6a] See also Chavannes, *Documents*, p. 231, for a correction.

both ends, shows that it came from a piece or roll of silk which had a width of about 19·7 inches, or 50 centimetres. The other strip, 12¼ inches (31 cm.) long and not quite complete at one end, bears a Chinese inscription read by M. Chavannes as meaning 'A roll of silk from *K'ang-fu* 亢父 in the kingdom of *Jên-ch'êng* 任城; width 2 feet and 2 inches; length 40 feet; weight 25 ounces; value 618 pieces of money.'[6b] M. Chavannes has pointed out that the kingdom of *Jên-ch'êng* was established in A. D. 84 and is represented by the present Chi-ning chou in the province of Shan-tung. M. Chavannes has duly emphasized also the historical interest attaching to this inscription, which furnishes us with exact data as to the origin, the dimensions, weight, and price of a piece of silk at the end of the first century or early in the second century A. D. And, I may add, the importance of this find is increased still further by the fact that it dates precisely from the period to which we must attribute the famous classical record about the direct silk trade of the West with the land of the Seres, as learned by Marinus of Tyre from the agents of Maës the Macedonian and preserved in extract by Ptolemy.[7]

Measure of silk width.

When discussing above the roll of silk discovered at the Lou-lan site, L.A. I. 002 (Plate XXXVII), I have shown at length that the width of 2 feet 2 inches (22 Chinese inches) which the inscription of our silk strip from T. xv. a. i indicates, when determined by the value of $\frac{9}{10}''$ (22·9 mm.) for the inch of the Han period as we see it in the wooden measures from T. VIII and T. XI, practically coincides with the actual measurement of the silk strip.[8] This is 50 cm., the measurement resulting from calculation (22·9 mm. x 22) being 50·38 cm. The mutual confirmation which the comparison of the silk strip from T. xv. a. i and of the wooden measures found at other stations of the Limes affords has its special value in view of the apparent uncertainties besetting early Chinese metrology.[9] The seal characters in the seal impression on the other strip have not as yet been deciphered.

SECTION V.—A RELIC OF THE ANCIENT SILK TRADE

Silk strip from T. xv. a. iii. with Brāhmī script.

A fortunate chance, for which we have reason to feel specially grateful, has preserved for us another interesting relic of that ancient silk trade at this very station T. xv. a. It consists of two strips of fine silk, undyed, T. xv. a. iii. 57, found together at the earliest of its refuse-heaps, iii. One of the strips, about thirteen inches long, is manifestly incomplete, having one end hemmed, the other torn off. But the other strip, though damaged in places, still retains the original selvedge at either end and shows that the piece of silk from which it was cut had a width of about 19½ inches, or close on 50 centimetres. At one end of this strip there appears, written in bold upright Brāhmī characters and in deep black ink, the short inscription of eleven *akṣaras* reproduced in Plate XXXIX. The strip had evidently been folded over before the ink had dried, and this accounts for the reverse impression of the legend visible below. At the very time of discovery, the writing had struck me as

6b The above translation embodies the correction made by M. Chavannes in the following interesting note of October 3, 1917, the last I received from his hand:

'Les mots que j'ai lus 古父 *kou-fou* ont été corrigés par M. Wang Kouo-wei (*Lieou cha to kien*, chap. II, p. 43b) en 亢父 *K'ang-fou*, et cette heureuse rectification permet de donner maintenant une traduction exacte. K'ang-fou est le nom d'une sous-préfecture située dans le royaume de Jen-tch'eng et qui était à 50 li de la ville actuelle de Tsi-ning tcheou dans le Chan-tong. Il faut traduire: "Un rouleau de soie provenant de K'ang-fou dans le royaume de Jen-tch'eng . . ."

'M. Wang Kouo-wei a en outre fait remarquer qu'un texte historique chinois peut être rapproché du document découvert par M. Stein; dans le chapitre LXXII du *Heou Han chou* (p. 8a) il est dit que, "au temps de l'empereur Chouen (126–144 p. C.), les barbares de l'Asie centrale se révoltèrent plusieurs fois; Tchong (崇, nom du roi de Jen-tch'eng) offrit aussitôt des monnaies et des pièces de soie comme subside pour les dépenses de la frontière".'

7 Cf. Ptolemy, *Geographia*, ed. C. Müller, I. xi. 6. Regarding the approximate date of Marinus of Tyre's great cartographical work (about A.D. 100), cf. Herrmann, *Seidenstrassen*, i. p. 19.

8 See above, pp. 373 sq., and pp. 660, 668.

9 Cf. Chavannes, *Les livres chinois* (*J. Asiat.*, 1905, janv.–février), p. 18 note 3.

showing the type of the S'aka or early Kuṣana period in India, and as being of older appearance than that I remembered from the single tablet with Brāhmī text, N. xx. 1, excavated on my first visit to the Niya Site.[1]

M. Boyer's decipherment of Brāhmī record.

When, early in 1917, I was able to turn my attention to this little relic of Indian writing and presumably Indian language from the Han Wall, the analogy of the silk strip T. xv. a. i. 3, with its Chinese inscription and its almost identical breadth, led me to hazard the conjecture that the Brāhmī legend, too, might prove to contain some record descriptive of the roll of silk fabric from the edge of which this strip had been cut off. But the only support I could see for it was in the Sanskrit word *paṭa* (*paṭṭa*), 'piece [of fabric]', which appeared in Dr. Hoernle's tentative transcript of the otherwise unintelligible legend as supplied in his Appendix *F*. Remembrance of the most valuable help received from M. Boyer in respect of the Kharoṣṭhī inscriptions at Mīrān made me turn once more to this exceptionally qualified collaborator. His painstaking scrutiny of the legend, aided by repeated examination in the original of the few characters not absolutely clear in the reproduction, has been rewarded by gratifying results. M. Boyer, in letters of March 13 and April 4, 1917, determined the reading as:

[ai]ṣṭasya paṭa giṣṭi ṣapariśa.

Mention of 'forty-six spans'.

Apart from the first word, in which the initial *akṣara*, owing to a hole in the silk, is incomplete and hence not quite certain, he was able to interpret the short record in a manner which appears to me philologically very convincing, and which accords remarkably well with archaeological considerations. Accepting *paṭa* in the obvious sense of 'piece [of cloth]', already recognized by Dr. Hoernle, he takes *ṣapariśa* as a Prākrit equivalent of Skr. *ṣat + catvāriṃśat*, 'forty-six'. The fact that in the Prākrit of the Kharoṣṭhī tablets from the Niya Site *catvāriṃśat* 'forty' appears as *capariśa*, and that in Pālī the same decimal numeral is contracted from *cattālīsaṃ* into *tālīsaṃ* when compounded with single numerals (e.g. in *cuttālīsaṃ*, 'forty-four'), makes this interpretation of *ṣapariśa* phonetically quite acceptable. This reading of the word as a number necessarily suggests that the preceding word *giṣṭi* may designate a measure. No such term is found in Sanskrit, but it is just from such a form that we can most appropriately derive the word *giṭṭh*, *giṭh*, meaning 'span', which M. Boyer quotes from modern Panjābī,[2] and which, as Sir George Grierson has been good enough to point out to me, is found also in Kāshmīrī *gith*, with the confusion between cerebral and dental typical in Dardic or 'Piśāca' languages.

Record notes length of silk roll.

This interpretation of *giṣṭi* appears to me all the more convincing because, if the record on the edge of the silk piece referred to the round roll of silk itself—it is always in this rolled form that silk is carried in Chinese trade nowadays, just as the roll L.A. I. 002 proves it for antiquity—, there was an obvious reason for its showing the *length* of the piece. The other details which the Chinese inscription on T. xv. a. i. 3, *Doc.*, No. 539, records, about its weight, price, etc., were not always essential, especially for the foreign trader carrying his purchased goods to distant countries with different measures, money, etc. The width of the silk was always visible to him and his purchasers without opening the roll of silk. But the length he had certainly to note for his own convenience, if the troublesome unrolling was to be avoided on every occasion. In short, while the Chinese inscription is such as would naturally recommend itself to the producer or wholesale exporter of the fabric as a guiding record, the Brāhmī note, in a strange script and language, was just a brief memorandum intended by the trader from the West for his own guidance. Chinese inscriptions of similar length and

[1] Cf. *Ancient Khotan*, i. pp. 369, 376, 412.

[2] Sir G. Grierson believes that the word 'belongs rather to Lahndā or Western Panjābī, which has a large "Piśāca" element in its vocabulary.' But against this M. Boyer observes that Dr. Hari Chand, himself a native of the Panjāb, declared the word to be in common use throughout the province, even as far east as Delhi. I am unable to follow up this point further at present.

purport may be often seen even now stamped on the outer edge of silk rolls as exported westwards from Ssŭ-ch'uan, etc. To the Brāhmī inscription would correspond the brief markings in Persian with which Muhammadan traders like my friend Shēr 'Alī Khān, the Kābulī merchant from Khotan and Yārkand, are accustomed to label the fabrics their caravans carry, whether silks exported from Ssŭ-ch'uan or British muslins, etc., brought from Kashmīr.

Measure of *gisti* or span.

Accepting then *giṣṭi* > *giṭṭh* to mean a 'span' and assuming, which seems reasonable, that the ancient trader's note referred to the complete piece of silk as purchased, we might attempt to determine its approximate original length. It is certain that by the modern Indian *giṭṭh* is meant a span measured between the extreme tips of the little finger and the thumb. But such a measurement can scarcely have an exactly fixed value nowadays, and we know still less what its accepted value may have been in Central Asia about the time of Christ. So it seems better to base our attempt at a conjectural determination on the assumption, likely *a priori*, that the standard of length was approximately the same about the beginning of the first century A. D. (T. xv. a. iii. 57) as about its end (T. xv. a. i. 3). There seems distinct support for this assumption in the fact previously noted that the width of the silk exported from China had undergone no change between the beginning of the first century A. D. (T. xv. a. iii. 57) and the third or early fourth century A. D. (L.A. I. 002).[3] If, then, we suppose the 46 *giṣṭi* or spans of the note in Brāhmī script to have been the equivalent of the 40 (Chinese) feet which we find recorded in T. xv. a. i. 3 as the original length of the silk piece, we arrive at the equation of 1 *giṣṭi* $= \frac{22{\cdot}9 \text{ cm.} \times 40}{46} = 19{\cdot}9$ cm., or close on 8 inches. The result coincides closely with the average span of the hand in India and the Middle East, and thus indirectly offers some support for M. Boyer's interpretation of both *giṣṭi* and *ṣapariśa*.

Interpretation of [*ai*]*ṣṭasya*.

The first word still awaits explanation. Except for the initial *akṣara*, which has suffered through a hole in the silk, but which both Dr. Hoernle and M. Boyer are inclined to take for *ai*,[4] the reading [*ai*]*ṣṭasya* is assured. That the word shows the Sanskrit genitive case ending *-sya* is certain. The mixture we see here of Sanskrit and Prākrit forms can, as M. Boyer rightly points out, cause no difficulty to any one who is familiar with the language of the Kharoṣṭhī documents from the Niya and Lou-lan Sites.[5] There remains the question of the import of this genitive and of the meaning of [*ai*]*ṣṭa* itself. No suggestion can be made as to the latter. But keeping in view the purpose of the 'label' entry, it has occurred to me—and M. Boyer sees no objection to urge against such a view—that we might possibly have here a partitive genitive meant to designate the particular quality or material of the silk contained in the roll. It is possible, however, that the word in the genitive was intended to designate the purchaser or something of the same sort.

Indian language of early silk trade record.

But even with this point left in doubt some observations of archaeological and also historical interest may be founded on the brief record now interpreted. In the first place, it proves that during the period between 61 B.C. and A.D. 9, roughly comprising the last reigns of the Former Han dynasty, traders accustomed to use an Indian script and language must have already made their way across the Chinese Limes for the sake of the 'silk of the Seres'. It would be useless in the

[3] Cf. above, p. 374.

[4] M. Boyer, writing on April 4, 1917, remarks: 'Je crois très probable que, dans cette inscription prākrite, le caractère en question représente un *ai*, dont la forme est basée non sur celle de *e*, mais sur celle de *a*, d'après le procédé graphique des alphabets par vous découverts et publiés par le Dr Hoernle [see *J.R.A.S.*, 1911, pp. 451 sqq.]. De cet *ai* il reste la double courbe spécifiant le phonème et des portions de la forme base *a*, savoir: le haut et le bas de la haste de droite et la tête pâteuse (par la rencontre des courbes voyelle) de la partie gauche. Parmi les variantes de forme possibles pour cette dernière partie, celle que la déchirure a fait disparaître ici demeure naturellement indéterminée.'

[5] For some general observations on this point, cf. *Ancient Khotan*, i. pp. 364 sqq.; above, p. 414.

present state of our knowledge to make guesses as to the origin and race of the particular trader to whose hand we owe this interesting relic of the ancient silk trade across Central Asia. But it is important to note that the writing is not Kharoṣṭhī, the script which our oldest previously known Central-Asian records of non-Chinese origin and secular character show, but Brāhmī, a script the early use of which in Central Asia we might otherwise have been inclined to connect with Buddhist religion and literature. From the language of the short document—probably the oldest extant specimen of Indian writing as yet known, as distinct from inscriptions—we may conclude that a Prākrit mixed with Sanskrit words must have been used for purposes of secular record in the region where the trader in question was born or settled. If Sir George Grierson is right in connecting the term *giṣṭi > giṭṭh* with the 'Piśāca' language group, its use here might point to the region where these languages or their influence are traceable. But the area thus covered is a very wide one, extending perhaps from the vicinity of Kābul in the west all along the Hindukush and K'un-lun as far east as Khotan.[6] In the second place, the fact that this relic of the early silk export from the interior of China to the West has been found at a ruined watch-station of the Limes well away from the ancient trade route to Lou-lan deserves special notice. In connexion with some other observations it raises a question of wider antiquarian interest, to which I shall have to return further on.

Before, however, examining this, it is desirable to review here briefly the miscellaneous objects other than written records which were recovered from the several rubbish layers of T. xv. a. The fact that they are datable in chronological succession adds to the antiquarian usefulness of these finds and may help hereafter to determine questions of detail which cannot be touched upon here.

Figured silk fabrics from T. xv. a.

This applies in particular to the fragments of figured silk fabrics, T. xv. a. 002; iii. 0010 (Plate LV). A comparison of them with decorated silks of the late T'ang period from the 'Thousand Buddhas' of Tun-huang, on the one hand, and with the plentiful fine brocades of Han times, recovered on my third journey from Lou-lan cemeteries, on the other, is likely to prove instructive.[6a] With these textile specimens may be classed the elaborately woven shoe, T. xv. a. i. 006 (Plate LIV), showing among its varied materials a covering of figured silk and throughout great skill in manufacture. For a detailed account of the technique, reference may be made to the Descriptive List in Chapter XX below.

Miscellaneous objects from T. xv. a.

Fragments of lacquered wooden bowls were found in abundance (see T. xv. a. i. 001, 005; ii. 001, 003, 004, 006; iii. 001, 009; v. 004). Numerous, too, are wooden seal-cases of different types (T. xv. a. 001; i. 002; ii. 005; iii. 002, 003; v. 005, see Plate LIII). T. xv. a. i. 009 (Plate LIV) is a well-preserved game trap, the use of which is explained by the information supplied by Mr. T. A. Joyce in the Descriptive List. A strange little object, the character of which has not yet been settled, is the wooden arrow-head (?), T. xv. a. iii. 008. A very curious find made here is

Broken arrows returned into store.

the small closely tied bundle containing the broken pieces of two feathered reed arrows, with one bronze arrow-head still packed away amongst them, T. xv. a. vi. 001 (Plate LIII). The most likely explanation of its origin is that, in accordance with a system still practised by military departments anxious to check petty defalcation or waste, these arrows no longer fit for use had to be returned 'into store' before they could be replaced by new issues. To put it into proper official language, it was a case of 'one arrow-head (broken) returned in support of indent for a new one'.[7]

[6] Cf. e.g. Grierson, *Paiśācī, Piśācas, and 'Modern Piśāca'*, *Z.D.M.G.*, 1912, pp. 72 sqq.

[6a] The pattern in the fragment T. xv. a. iii. 0010 (Pl. LV) is of special interest, as it is closely allied to that in Ch. 00118 (see below, chap. XXIV. sec. ii) and helps to prove the early date of this remarkable piece, unique among the Ch'ien-fo-tung textiles.

[7] I was amused to see that this little find with its obvious explanation, as set forth in *Desert Cathay*, ii. p. 127, had received due attention on the part of the writer who in *Blackwood's Magazine*, 1917, January, p. 87, humorously describes the initiation of future officers of the New Armies into such time-honoured military routine.

Section VI.—THE 'NEW ROUTE OF THE NORTH'

Abundance of records at T. xv. a.

It still remains for us to consider how we are to account for the great extent of the refuse deposits and the abundance of records among them at a point like T. xv. a, where practically no structural remains, even of the modest type usual at ordinary watch-towers of the Limes, could be traced. The question must force itself upon our attention when we bear in mind that the number of records recovered at this place, and included in M. Chavannes' publication, 117 altogether, is considerably larger than the number of those from T. xiv, the site of the Jade Gate, 80 in all, and second only to the aggregate of documents from T. vi. b, which amounts to 228. At the last-named point it was possible to account for the abundance of these ancient 'waste papers' by the fact that the office from which they had been thrown out belonged to the headquarters of an outlying section of the Limes, important as protecting its flank and guarding a practicable route from the west. Considering how close T. xv. a is to T. xiv, the site now identified as the main station of 'the Yü-mên barrier', the question confronting us here appears distinctly more difficult to answer. Fortunately we can have recourse here to an interesting historical notice, bearing on the ancient topography of this region, but not as yet discussed in these pages. If it is correctly interpreted in the light of the local knowledge that we possess now, I think that it may help us towards a satisfactory solution.

Wei lio's notice of routes from Tun-huang.

The notice I refer to is to be found in the passage of the *Wei lio* (composed between A.D. 239–265) which deals with the several routes leading from Tun-huang to the Western Countries, and which I have already discussed several times.[1] As we have seen, the *Wei lio* distinctly tells us that of 'the roads which, starting from Tun-huang and Yü-mên kuan, pass into the Western Countries there were two before, but now there are three'. Two of these roads, which are described as the routes of the south and the centre, have been definitely proved to be identical with the routes leading along the Āltin-tāgh slopes to Mīrān and through the desert to Lou-lan respectively, and need not detain us here. The route with which we are now concerned is the one which the *Wei lio* calls elsewhere 'the new route of the north',[2] and the initial portion of which is thus described:

'New route of the north'.

'The new route [of the north] is the one which, starting from Yü-mên kuan, sets out on the north-west, passes through Hêng-k'êng, avoids the San-lung [desert of] sand as well as the Lung-tui, leads north of Wu-ch'uan and arrives, in the territory of Chü-shih, at Kao-ch'ang (Kara-khōja, Turfān), which is the residence of the Wu-chi-hsiao-wei; then it turns westwards and rejoins the central route at Ch'iu-tzŭ (Kuchā).' The route meant here is, as M. Chavannes has already pointed out, obviously identical with the one mentioned in the following passage of the chapter of the Former Han Annals that deals with the Western Regions:[3] 'During the period *Yüan-shih* (A.D. 1–5) there was made from the kingdom of the Posterior King of Chü-shih a new route which, passing north of Wu-ch'uan, penetrated as far as the Yü-mên barrier; the journey was thereby reduced. The Wu-chi-hsiao-wei Hsü P'u-yü had opened [this route] in order to shorten the length of the road by one-half and to avoid the dangers of the Po-lung-tui ("White Dragon Mounds").'

'New route' of Former Han Annals.

We see in this earlier text the starting-point as well as the end of the 'new route' quite clearly indicated. The latter is the 'Jade Gate barrier', which we have located on the westernmost portion of the Limes with its headquarters at T. xiv. The former is the region about Guchen (Ku-ch'êng-tzŭ) and Jimasa, at the northern foot of the T'ien-shan portion overlooking the Turfān

[1] Cf. Chavannes, *Les pays d'occident d'après le Wei lio*, *T'oung-pao*, 1905, pp. 528 sqq.; above, pp. 417 sqq., 555.

[2] See Chavannes, *T'oung-pao*, 1905, p. 556; above, p. 418.

[3] I follow M. Chavannes' rendering, *T'oung-pao*, p. 533, note 1; see also Wylie, *J. Anthrop. Inst.*, xi. p. 109. M. Chavannes gives A.D. 2 as the exact date when the new route was opened. I am unable to trace this specific date in the translated passages accessible to me.

depression, a relatively fertile tract which under the name of 'Posterior Chü-shih' is often mentioned in the Former Han Annals. As the protectorate of Pei-t'ing, the later Bēsh-balik, it figures largely also in the Chinese records of the T'ang period.[4] That we are so far unable to identify the intermediate locality of *Wu-ch'uan* 五船 (literally meaning 'the five boats') and that of *Hêng-k'êng* 横坑, which the *Wei lio* mentions in addition, is not to be wondered at, since that portion of the easternmost Kuruk-tāgh which lies west of the route from Tun-huang to Hāmi, and which 'the new route of the north' must have crossed, has up to the present remained practically unexplored.

Direct route from Tun-huang to Hāmi.

But if we look at a map, such as sheet No. XXI of the Russian Trans-frontier Map on the scale of 40 versts to 1 inch, which shows the whole area between Guchen and Tun-huang, whether surveyed or not,[5] two facts emerge quite clearly. On the one hand, we see that if a direct route could be struck across the desert hill ranges and plateaus intervening between the easy pass by which the present road from Guchen to Hāmi crosses the T'ien-shan (north of the station of Ch'i-ku-ching) and the line of the Limes near T. XIV, it would reduce the distance to be travelled between the two points by about one-half, just as the notice in the Former Han Annals puts it, compared with the devious and difficult route leading past the salt wastes of the ancient Lop lake-bed to Lou-lan, thence to Turfān, and so on to Guchen.[6] On the other hand, we cannot fail to realize that such a route would necessarily have to pass by the depression, sinking almost to sea-level, where the course of the river coming from the Hāmi oasis terminates in the Shona-nōr marshes.

Bifurcation of route to Guchen and Turfān.

Once this depression was gained from the side of the Tun-huang Limes, it would be possible even now to reach in an almost straight line the low saddle in the eastern T'ien-shan which the present Chinese cart-road from Hāmi to Guchen crosses between the stations of Ch'i-ku-ching and Ta-shih-t'ou. From the same depression it would have been open for travellers of ancient times, instead of thus proceeding north-westwards to 'Posterior Chü-shih' or Guchen, to turn to the west and continue their journey to the Turfān depression, or 'Anterior Chü-shih', as the Former Han Annals call it, which comprises Kao-ch'ang also amongst its oases, a site marked by the ruins of the present Kara-khōja. Hence the statement of the *Wei lio* which makes the 'new route of the north' lead to Kao-ch'ang in the territory of Chü-shih is easily reconciled with the earlier account of the route preserved in the Former Han Annals.

[4] Cf. Wylie, *J. Anthrop. Inst.*, x. pp. 22 sqq.; xi. pp. 106 sqq. For the identification of Pei-t'ing cf. Chavannes, *Turcs occid.*, p. 11. My visit to this territory in October, 1914, enabled me to verify the correctness of M. Chavannes' conclusions and to identify in detail the localities of the T'ang itinerary there discussed by him; see *Geogr. Journal*, 1916, xlviii. p. 201.

[5] This sheet in its latest edition, as reproduced also in vol. iii (Map II) of the Report on Captain Roborovsky's expedition, Petrograd, 1899, shows the routes surveyed by that expedition between Hāmi and Turfān, in the northernmost portion of the Kuruk-tāgh locally known as Chöl-tāgh, 'the desert hills', as well as the line followed by Captain Roborovsky on the reconnaissance which he made from a point west of Khara-nōr into the desert hills north-westward, and which is referred to below, p. 707.

The other routes indicated by this Russian map in the wholly unexplored desert area west of the Hāmi–Tun-huang road are based solely on 'native information' which cannot be checked. There is strong reason to suspect that the strings of names shown for certain supposed wells along these route-lines refer in reality to halting-places close to, if not actually on, the known road from Hāmi to Tun-huang. Such duplication or triplication of apocryphal routes derived from inadequately collated native itineraries is an experience well known to cartographers who are familiar with the early mapping of other parts of Asia, not necessarily deserts. The existence of the 'Toli lake' shown in that map is particularly dubious.

[6] I may point out here that the direct tracks leading from Turfān to Guchen across the high, snowy portion of the T'ien-shan intervening are open only for a part of the year, and, as my crossing in 1914 of the least difficult of the passes, the Pa-no-p'a, showed, impracticable at all times for any but the lightest transport. Trade caravans and military convoys would at all times have to make a great detour either west (via Urumchi) or east (via Ulan-su) in order to get round the Bogdo-ula range by a route practicable for camels or carts.

This point has to be borne in mind when we compare the two routes referred to in the notice of the Former Han Annals. The 'new route of the north' coming from the Shona-nōr must have crossed the T'ien-shan by the easy and low saddle north of Ch'i-ku-ching over which the present Chinese cart-road from Hāmi to Guchen and Urumchi passes.

Routes from Shona-nōr to Turfān now impracticable.

The Russian map above mentioned still shows two routes directly connecting Shona-nōr with Turfān; but an examination of the ground has revealed a great change in the conditions affecting their use. The northern one, which Colonel Kozloff followed, apparently in 1895, leads to Chiktam, and was accurately surveyed in the autumn of 1915 under my instructions by Surveyor Muḥammad Yāqūb. It proved, for a distance of close on 100 miles, to be wholly devoid of water, and thus impracticable now for caravan traffic. The same was found to be the case with the southern track, which Rai Bahādur Lāl Singh, on his difficult journey across previously unexplored portions of the central Kuruk-tāgh in the winter of 1915, succeeded in striking from the south and then followed through to Dēgar, in the south-east corner of the Turfān depression.[7] He found that the salt springs along it, the ice of which, as local tradition at Dēgar remembered, once made the use of the track practicable in the winter for hardy hunters of wild camels from Hāmi, had completely dried up. Here, too, caravan traffic must have been impossible for a long time past.

Roborovsky's reconnaissance north of Su-lo Ho.

The change of physical conditions which, in the case of the two routes just mentioned, may be considered as proved for relatively recent times, appears to me to offer an adequate reason for believing that the southern and still more difficult portion of the 'new route of the north', I mean the one intervening between the Yü-mên barrier and the vicinity of the Shona-nōr, must have already become impossible at a far earlier period. The total distance in a straight line between these two points amounts, according to the Russian map mentioned above, to close upon 190 miles. Of the ground traversed by such a line only about one-fourth, near its southern end, has so far become partially known to us through a reconnaissance which carried Captain Roborovsky in February, 1894, from below Khara-nōr into the desert hills north-westward.[8] Having crossed the Su-lo Ho bed at a point which a comparison of his Map I with my own, No. 78. A. 3 or Plate 33, proves to have been near T. XIX, he traversed a succession of absolutely barren hill chains and valleys till he was about 46 miles in direct distance from that crossing-place. There want of water for his horses forced him to return by the same route. It is of interest to note that in a valley 'with a flat granite threshold', which from his description appears to have been met at about 26 miles' direct distance from the river bed, the Russian traveller found 'shallow rounded troughs in the rock or small basins filled with water from the melting snow'. Further on, at the top of a pass, 6,640 feet above sea-level and about half a dozen miles from the extreme point reached, he came upon a decayed *obo*, or cairn, and traces of an old road running from south-west to north-east.[9]

Ancient route closed through desiccation.

The discovery of those rock-troughs holding water at the time of Captain Roborovsky's journey is of special interest, as it suggests the possibility that the unexplored ground beyond, along the line which the ancient 'new route of the north' is likely to have crossed towards the Shona-nōr, may even now contain a few places where water, at least during certain seasons, might be obtained either in wells or in natural rock-cisterns, such as I found in the western Kuruk-tāgh during

[7] Cf. my *Third Journey*, etc., *Geogr. Journal*, 1916, xlviii. p. 206. See also Maps 31, 34 of my 1 : 500,000 atlas.

[8] Extracts from Captain Roborovsky's account of this excursion are translated by Hedin, *Central Asia*, ii. pp. 100 sqq., where reference is made to Roborovsky, *Trudij Expeditsij*, etc., i. pp. 164–69. These extracts, which alone are accessible to me, do not indicate the object aimed at by this excursion. But from the fact that the Russian Trans-frontier Map reproduced in the report on the expedition makes Captain Roborovsky's route coincide partly with the westernmost of the tracks which the compilers of that map took from 'native information', as mentioned above, I conjecture that the purpose was to test the existence of this alleged route towards 'Lake Toli'.

The cartographical risks resulting from a combination of actual survey work with itineraries gathered from native reports are illustrated *inter alia* in the map referred to by the fact that a well is marked in a position where Captain Roborovsky's survey and description show a rugged rocky range, of course waterless, crossed by a difficult pass 6,640 feet above sea level.

[9] Cf. Hedin, *Central Asia*, ii. p. 101.

my explorations of 1915 and in the barren hill ranges about Kelpin, known there by the designation of *kăk*.[10] In both these hill regions I have observed unmistakable evidence that desiccation has advanced within historical and even relatively recent times. As their physical conditions show essentially the same character as those of the ground discussed here, it appears *a priori* very probable that this region too has experienced an advance of aridity, and that consequently in ancient times it may have presented no greater obstacle to the passage of raiders from the north than the Kelpin ranges would at the present day.[11]

Desiccation advanced since Limes construction.

In support of such a conclusion we can point to archaeological evidence even more direct and convincing. It is to be found in the very fact that the Chinese, when constructing the Tun-huang Limes towards the close of the second century B. C., found it necessary to extend it so far west of Khara-nōr as my explorations have proved. It is obvious that if the desert north of the terminal course of the Su-lo Ho had been then as impassable through want of water as it certainly now is for parties of mounted raiders, it would have been quite needless to construct this far-flung line of wall and watch-stations over desert ground bare of all resources, and to maintain it for centuries in the face of serious difficulties.

T. xv. a probable starting-point of 'new route of north'.

I regret that the pressure of other tasks, and a variety of practical considerations connected with the season and the exhausted condition of camels and men, did not permit me to extend my explorations into this desert ground north of the Limes on either of my visits to the Tun-huang region. But if I was thus denied the chance of personally examining the ground through which I believe that ancient 'new route' to have passed, we have, I think, at least enough topographical and archaeological evidence for tracing its starting-point. The following are the main reasons which make me inclined to locate it at the ruined station T. xv. a. In the first place, we have the definite statement in the Former Han Annals which names the Yü-mên barrier as the southern end of the 'new route'. This is confirmed by the *Wei lio's* notice, which adds the important indication that the route 'sets out on the north-west'. We have seen that the headquarters station of the 'Jade Gate barrier', when the 'new route' was opened up at the beginning of the first century A. D., was still placed at T. XIV, and it is in its immediate neighbourhood that we may reasonably suppose the route to have passed through the actual line of wall. Now on referring to the detailed map in Plate 33 we observe that T. XV. a occupies a position particularly convenient for such a *débouché* from the line of the Limes. Northward it offered easy access to the bed of the Su-lo Ho, which here lies narrow and well confined between firm banks of gravel, whereas from about three miles further east it is fringed on the left bank by impassable marshy ground.[12] Thus a safe crossing of the river was assured here at all seasons.

[10] Cf. *Desert Cathay*, ii. pp. 424, 426. As I have pointed out there, the conditions still existing in those outer ranges about Kelpin made it possible down to modern times for Kirghiz raids to be carried out from the T'ien-shan valleys upon the Kāshgar–Ak-su high road. There is here a curious analogy to the conditions we must assume to have prevailed in the wastes of the easternmost Kuruk-tāgh during the period when Hun raiders from across the eastern end of the T'ien-shan could still make their way through them towards Tun-huang and the Chinese route to Lou-lan.

[11] This assumption furnishes also the best explanation for the old cairns marking tracks which Dr. Hedin found when passing through the desert hills of the Kuruk-tāgh on a line north of Bēsh-toghrak, and thus a considerable distance to the west of the ground here discussed; cf. *Central Asia*, ii. pp. 106 sq. It is impossible from the few objects found near some of these cairns to determine the period from which they date.

[12] It is true that there is a short stretch of firm ground by the left bank of the river to be found just north of T. XIX, where Captain Roborovsky appears to have effected his crossing in the winter of 1894, as stated above. But it is merely a narrow neck flanked by wide marshes on either side, and the ground between the high clay terraces scattered here is so low as to be probably subject to inundation at the height of the spring and summer floods. The objections to choosing this point as a crossing-place for a route to be used at all seasons are obvious.

Advantages of position of T. xv. a.

Another distinct advantage which T. xv. a offered as a subsidiary 'gate' station for the 'new route' lay in the immediate vicinity of springs with drinkable water in the marshy basin adjoining the plateau tongue on the south and the abundant grazing to be found there. I know from practical experience how important such considerations are at points where the last comfortable halt is to be made before the start on a long and trying journey through absolute desert, or the first rest to be allowed to men and animals after such a crossing. I may further point out, with reference to what the detailed map shows, that for travellers bound in the direction assumed for the 'new route' a move first to T. XIV, and thence along the extensive marshes to the west of it towards the first practicable river-crossing, or *vice versa*, would have implied a considerable detour.

Records later than A. D. 1–5 prevail.

In view of these topographical reasons we are justified, I think, in attaching special significance also to such indications as the documents found at T. xv. a furnish. As has already been noted in the opening remarks of this section, the mere fact that so large a number of records was recovered at this point strongly favours belief in the importance of the station once established there. If our explanation is right, we ought to expect the great majority of the records to be contemporary with, or later than, the period A. D. 1–5, when the 'new route of the north' was first opened. This expectation is borne out by the fact that the refuse deposit of T. xv. a. iii, which, as we have seen, has its *terminus ad quem* in the last years of the Former Han dynasty extending to A. D. 9,[13] has contributed thirty-six documents to M. Chavannes' publication (Nos. 446–81), whereas the total number of records yielded up by the refuse-heaps ii and i, which must be assigned to the periods A. D. 15–56 and A. D. 65–137 respectively, amounts to sixty-six (Nos. 482–547). To these may have to be added fourteen pieces from T. xv. a. iv and v, deposits which furnished no dated records but adjoin i and ii respectively.

Records of traffic through barrier.

Among individual documents there is quite a number with contents pointing to local business such as might appropriately be transacted by officers charged with the immediate supervision of traffic passing through the Limes. In T. xv. a. i. 16, *Doc.*, No. 541, we have a significant reference to some person 'preparing to pass north of the barrier'. In T. xv. a. v. 4, *Doc.*, No. 553, regulations about 'entry into and departure from', evidently, the Limes barrier, are quoted. In T. xv. a. iii. 22, *Doc.*, No. 479, the entry and passing out of a cart is mentioned. No. 461 might well be a kind of passport relating to a party of officials *en route*. T. xv. a. iii. 44, 24, *Doc.*, Nos. 454, 455, register each the dispatch of several letters to different addresses, including one 'at the residence of the governor of the command' and thus certainly at a considerable distance. It is the kind of record which might well be expected at a station forming the terminus of a route and of a postal line maintained along it.

Want of fuel along 'new route'.

In the light of local knowledge the report furnished in T. xv. a. v. 9, *Doc.*, No. 552 (Plate XIV), seems to be of special interest. There we are told of the company of a *t'ing*[13a] located so far away that 'by day one does not see the smoke signals; by night one does not see the fire signals; the native functionaries, the commandant and the officers of the post are warned not to burn fuel any further in order to avoid [needless expenses].' Knowing as I do the abundance of fuel in the shape of reeds, scrub, or wild poplars, which must have been available, in ancient times just as now, within easy reach of every watch-station on the Tun-huang Limes, it appears to me impossible that the watch-station to which this record refers could have been situated on the line of the Limes itself. Nor is there a single station on the latter of which it could possibly be asserted that it was too distant for its fire or smoke signals to be visible from one or more of the neighbouring watch-towers. On the other hand, the difficulty about fuel was bound to make

[13] Cf. above, p. 699; Chavannes, *Documents*, p. 100, regarding the date of No. 449.

[13a] For the interpretation of the term *t'ing* 亭, see below, pp. 747 sq.

itself keenly felt at any of the watch-stations which we may assume to have been established on the 'new route' leading through the barren wastes of the Kuruk-tāgh northward. It is this very difficulty, together with the almost total want of grazing, which is brought home to every traveller as he passes along the present Chinese 'high road' from An-hsi to Hāmi and has to pay the somewhat exorbitant charges made for fuel and reed straw at all the halting-places in that desert of gravel and stone.[14].

Desert vegetation scarce on An-hsi–Hāmi route.

All the information that we have about this region, now known to the Chinese by the vague but convenient designation of the 'Pei-shan' Gobi, proves that the scarcity of vegetation, just like that of water, increases the further west one crosses this desert. Hence it appears to me certain that, even though desiccation is likely to have made conditions worse since Han times, the difficulty about fuel must have been felt quite as much then on the 'new route of the north' as it now is on the An-hsi–Hāmi route which has taken its place.[15] Though the latter runs on a line that is on the average some 60 miles further east than the one likely to have been followed by the ancient 'new route', I can well imagine that any attempt to maintain a system of fire-signals over the An-hsi–Hāmi road, before the telegraph wire reached it late in the last century, would have met with exactly the same difficulty which our document from T. xv. a. v records.

Whether a systematic search of the desert to the north-west might yet reveal remains of the modest hovels likely to have once stood at the successive stages of the 'new route', that is, of their refuse-heaps, is a question which I cannot answer, but which I should like to recommend to the attention of future explorers. I may, however, point out that we have, perhaps, a reference to one of the nearest of these conjectured roadside stations of the 'new route' in the previously quoted record T. xv. a. iii. 43, *Doc.*, No. 452 (Plate XIII).[16] It directs the issue of food-rations for three marches to a person dispatched from 'the fortified post of *Yü-ch'ang-lo*' to Ta-chien-tu, i. e. the western terminus of the Limes wall. The distance to that point from T. xv. a accounts for two marches only, thus proving that the starting-place lay one march beyond. This fact and the mention of a service camel being provided as a mount for the journey seem to justify a presumption that Yü-ch'ang-lo was a post in the desert where, owing to scarcity of water and grazing, it was preferable to station riding camels instead of horses for official use. Finally, it may also be mentioned that it would be easier to account for the silk strip, T. xv. a. iii. 57, with its Brāhmī inscription, having been left behind here by some trader from the West, if we may assume that the place where it was discovered was the 'gate' station for an important new trade route, and not a mere watch-post amongst others guarding the line of the Limes.

Yü-ch'ang-lo located on 'new route' (?).

Section VII.—THE GREAT MAGAZINE OF THE LIMES

The series of watch-towers T. xv–T. xvii and the continuous stretch of wall connecting them form a link, as it were, between the two well-defined sections of the Limes which I have distinguished above: the first running across a succession of spring-fed marshes and the second skirting lakes and swamps filled by the Su-lo Ho waters.[1] My remarks on T. xv–T. xvii can be brief. I may, therefore, conveniently prefix them to the account I shall have to give of the most notable ruin on the second of these sections.

[14] For a brief account of this desert route, cf. *Desert Cathay*, ii. pp. 239 sqq., and below, chap. xxviii. sec. i; see also Maps Nos. 73, 76, 77, 80, 81.

[15] We cannot suppose that the watch-station referred to may have been situated along the Lou-lan route beyond the western end of the Limes; for fuel is plentiful along it all the way down the depression of Bēsh-toghrak until the dried-up bed of the ancient salt sea is reached beyond Kum-kuduk.

[16] See above, pp. 699 sq.

[1] Cf. above, p. 663.

T. xv proved to be a badly ruined tower occupying the top of a small but conspicuous clay terrace about 20 feet high, which rises near the eastern end of the dry wind-eroded basin previously mentioned. The brick masonry, though much decayed, showed the usual intervening layers of tamarisks and stood to a height of about 13 or 14 feet. Débris covered the remains of a small room adjoining the east foot of the tower; of neither could the exact dimensions be determined. Among the miscellaneous relics, found under this débris and described in the List below, I may mention two cast-iron hoe-blades of excellent make, T. xv. 004, 009 (Plate LIV), and a spade of welded iron, 0010 (Plate LIV); a woven hemp string shoe, 006 (Plate LIV), and fragments of a woollen pile carpet, 007 (Plate XLIX). A curious find was made on the steps cut into the clay which led up to the tower, in the shape of some fragments of iron, 005, which evidently belonged to old matchlocks. They were found tied up into a little bundle under about a foot of débris which had fallen from the tower above. Their iron was far less corroded than that of the hoe-blades unearthed in the ruined quarters. It seems to me very probable that the bundle of fragments had been lost here by some hunter who had used the tower, which commands an extensive view, as a look-out for wild camels, still frequent on this desolate ground. I subsequently found the top of a similar terrace north of T. xvi crowned with a *sangar* of clay lumps, evidently built as a screen by a still later hunter.

Remains of watch-tower T. xv.

From this point the wall could be traced, unbroken though low, across a gravel-covered plateau to T. xvi, about 1½ miles distant. This tower rose on the southern edge of a dry scrub-filled basin and commanded a distant view both to the north and east. Built with sun-dried bricks, 14″×7″×4½″ in size, and having layers of reeds after every three courses, it still stood in fair preservation to a height of over 13 feet. As the plan (Plate 39) shows, it measured 24 feet square at the base and contained on its top a small guard-room, i, 8 feet square. Built against the west foot of the tower were the débris-covered remains of another small room, ii. At a distance of about 50 yards off to the south-east there rose the half-petrified remains of three stacks of reed fascines of the usual size. From the guard-room i there were recovered ten inscribed slips, among which those still decipherable are given by M. Chavannes in *Doc.* Nos. 579–83.[2] The room ii also yielded a few fragmentary records. Among the former are two fully-dated documents, *Doc.* 579, 580 (Plate XVII), containing receipts of A.D. 68 and 77 for rations issued to two soldiers from the Fu-kuei 富貴 canton of the command of Tun-huang. To the Later Han period belongs also the fragment of an inscribed wooden stick, T. xvi. 2 (misread *b*), *Doc.*, No. 581, on which is read the name of the *Chin-ch'êng* 金城 command instituted in 86–74 B.C.

Finds at watch-tower T. xvi.

From T. xvi the line of the wall, in places still in fair preservation, was traceable across gravel terraces and intervening shallow depressions to the tower T. xvii. This rose on the western edge of a wide lacustrine basin crossed by the Su-lo Ho and filled to the north and east with lakelets and extensive marshes. The tower, about 22 feet square at its base, was built of brickwork like that of T. xvi, but was badly broken. Its actual height was about 10 feet. Close to it, on the south side, were the scanty remnants of a wall which seems to have belonged to some small quarters. No finds attended the clearing here. About 120 yards off to the south-east there were remains of a square stack of reed fascines. About 20 feet from the tower in the

Remains at tower T. xvii.

[2] To these must be added probably *Doc.* Nos. 545, 561, the 'site-marks' of which slips, having become partially effaced, have been misread as T. xv.

I may note here that these and a few other occasional misreadings of 'site-marks' on Limes records were due to the minute markings in ink or pencil, which were all that I could make on the very limited space available, having become difficult to read before M. Chavannes examined them in 1909–10. Their rectification could be effected only through close comparison with my original notes on the 'finds' from different stations, etc., and it was not possible for me to make this comparison when M. Chavannes' *Documents* were passing through the press in 1911–12.

same direction a small refuse-heap had survived on the bare gravel, and this yielded over a dozen records on wood and bamboo, most of them much effaced. Among those deciphered by M. Chavannes, *Doc.* Nos. 392–97, is a complete slip, No. 392, dated in the year 58 B.C. It specifies the names of thirty-two 'garrison soldiers' with their places of origin, among them the Fu-kuei canton being mentioned again. Among the other slips there are three containing fragments of texts, apparently medical. For miscellaneous finds in the same refuse deposit, including a fabric probably made of the fibre of the paper mulberry-tree, see the Descriptive List in Chapter XX below.

Ruins of T. XVII. a by marsh edge.

On descending from the edge of the plateau to the depression eastwards, the low mound marking the wall was very soon lost sight of amidst scrub and luxuriant Toghraks. Its direction was to the north-east, and there, only about a mile off, I discovered the remains of a small, completely broken tower, T. XVII. a, on the top of an isolated and steep terrace of clay. This rose itself like a tower to a height of some 50 feet by the very edge of a wide marshy area, which extended eastwards with several open lagoons as far as T. XIX, and on this stretch of about three miles had obviously made defence by a wall quite unnecessary. To the north, too, there was water-logged, impassable bog more than a mile wide. The whole looked deceptively like a terminal basin of the Su-lo Ho, and it was only on a subsequent reconnaissance that I could locate to the north-west the outflow of the river, well screened behind a projecting plateau.[3] Apart from fragments of the usual grey mat-marked pottery of the Han period, the only find made at T. XVII. a was the iron spear-point shown in Plate LIII.

Big ruin overlooked by T. XVIII.

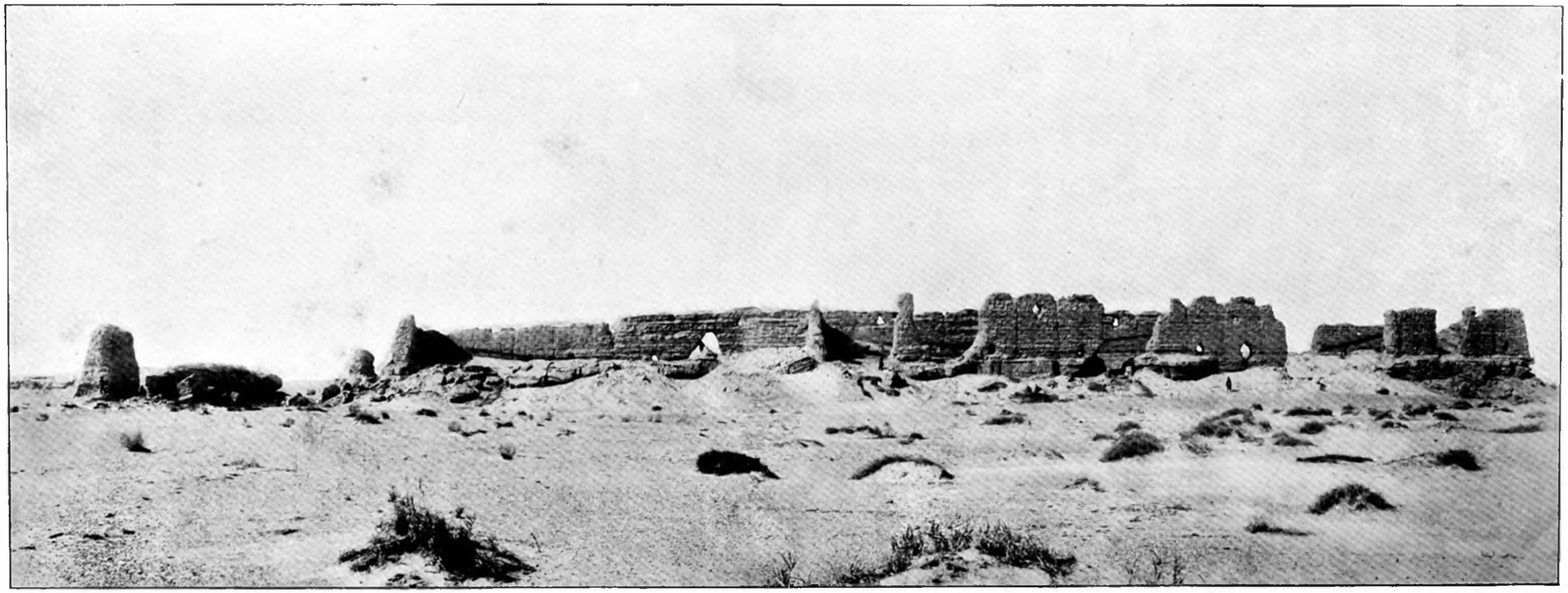
It is behind the great natural barrier presented by that marsh belt, about four miles long from east to west and nearly two miles across in the middle, that there rises the imposing ruin (Fig. 186), overlooked by the tower T. XVIII, which has been briefly referred to already in connexion with my first journey to Tun-huang. When I returned for its closer exploration, towards the end of April, this huge structure still looked as puzzling as before. It was impossible to doubt its connexion with the Limes, the line of which, marked here by the towers T. XVII. a and T. XIX, passed just in front of it. But neither what I had by that time learned of the general plan and arrangement of the Limes, nor the exact survey now made of the palace-like ruin, seemed at first to furnish any clue as to its true character and purpose.

Structural features of ruin.

The building, which the photograph in Fig. 186 shows as seen from the south, together with its enclosing walls, presented the imposing length of about 560 feet from east to west (see plan in Plate 41). If the idea of a Ya-mên or barrack had first suggested itself, this was quickly dispelled by an examination of the structural features. These comprised mainly three big halls, each 139 feet long and 48½ feet wide within, which adjoined lengthwise and thus formed a continuous block facing due south. Their walls, 5½ feet thick and constructed of solid layers of stamped clay from 3 to 3½ inches in thickness, occupied a terrace of hard clay. This terrace had been cut away to within 10 feet or so of the outer faces of the walls to provide a kind of natural base. It originally formed the northern end of a clay ridge, seen on the extreme left of Fig. 186, and had been separated from it by a deep cutting about 65 feet wide, which probably furnished a great portion of the material used for the construction of the walls. This natural base, even after the levelling that its top had obviously undergone, still stood fully 15 feet above the low-lying ground occupied by the enclosure, and thus helped to

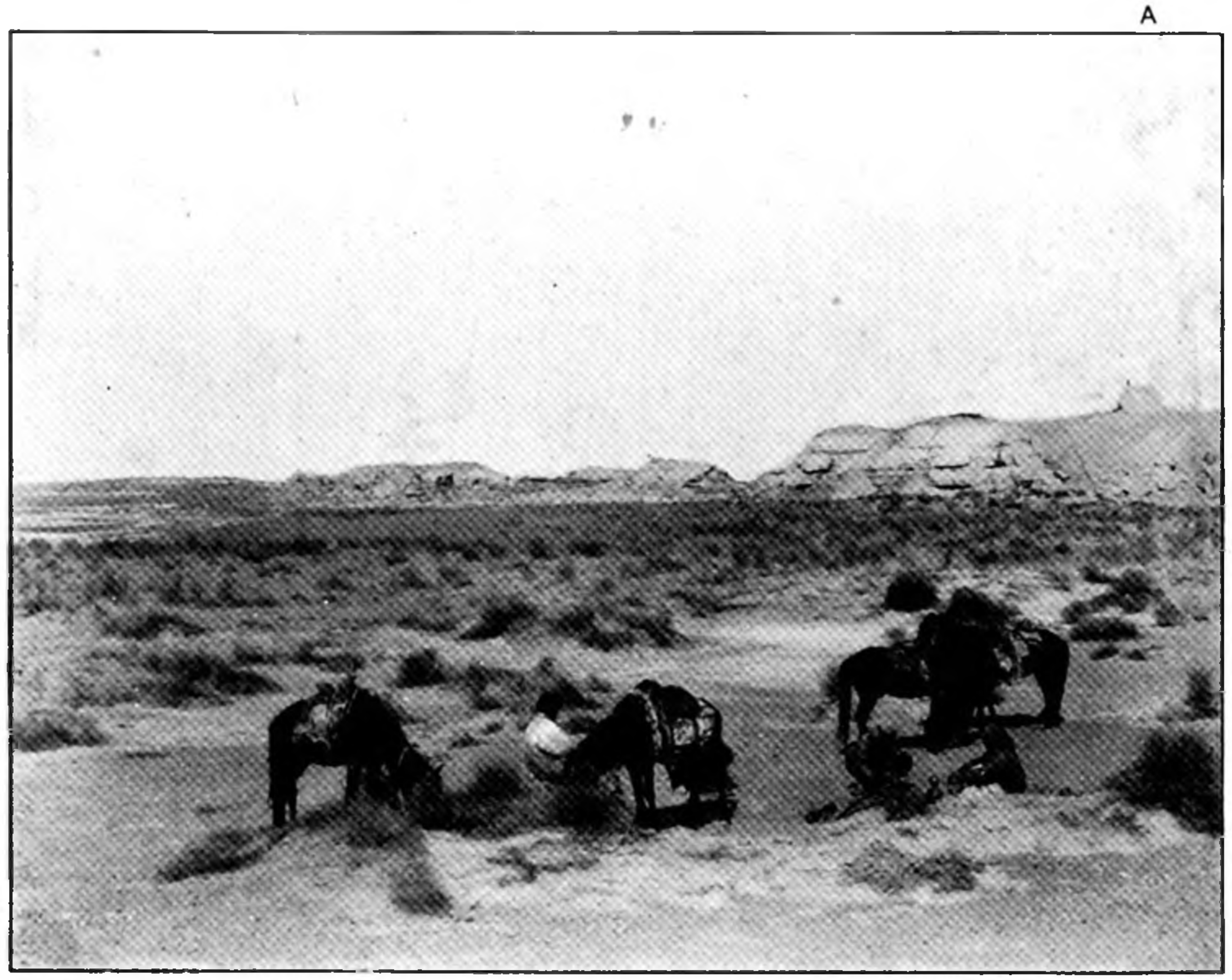
[3] On April 29, 1907, I measured here a volume of approximately 1,120 cubic feet per second. On May 13 the Su-lo Ho, where it flows out from the Khara-nōr north of T. xx. c, had a volume of about 1,440 cubic feet per second. Without simultaneous measurements at these points and also at T. XIX it is impossible to estimate with any approach to exactness the amount of water which the Su-lo Ho carries into, and leaves behind in, riverine marshes between the outflow from the Khara-nōr and T. XVII.

185. RUINED TOWN OF SO-YANG-CH'ÊNG, SEEN FROM NORTH-EAST, WITH INNER EAST WALL IN FOREGROUND AND TOWER OF NORTH-WEST CORNER BASTION IN DISTANCE ON RIGHT.

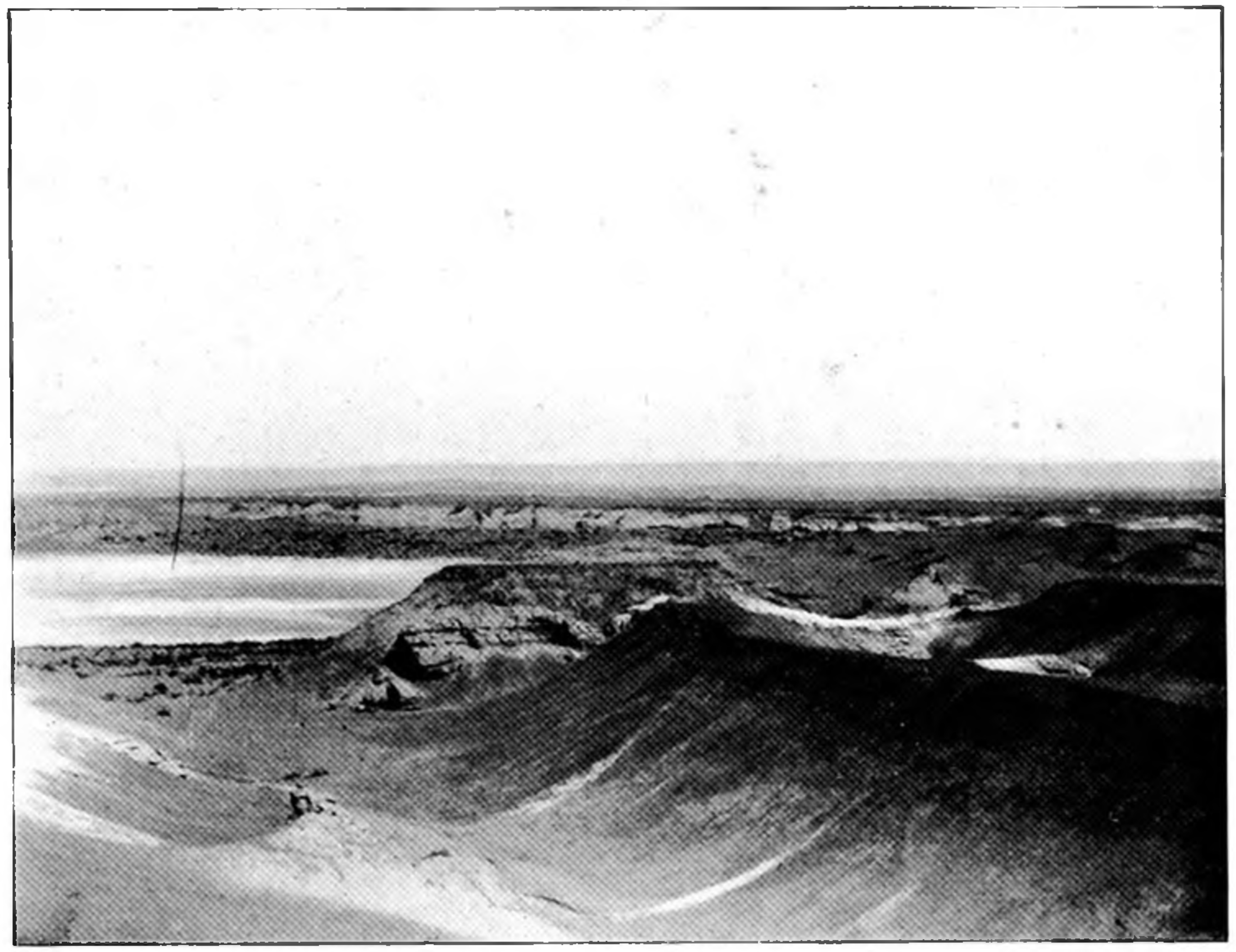


186. RUINS OF ANCIENT MAGAZINE T. XVIII, ON TUN-HUANG LIMES, SEEN FROM SOUTH.

On extreme left watch-tower at south-west corner of inner enclosure. The figures of men standing at different points of the structure serve to indicate its size.

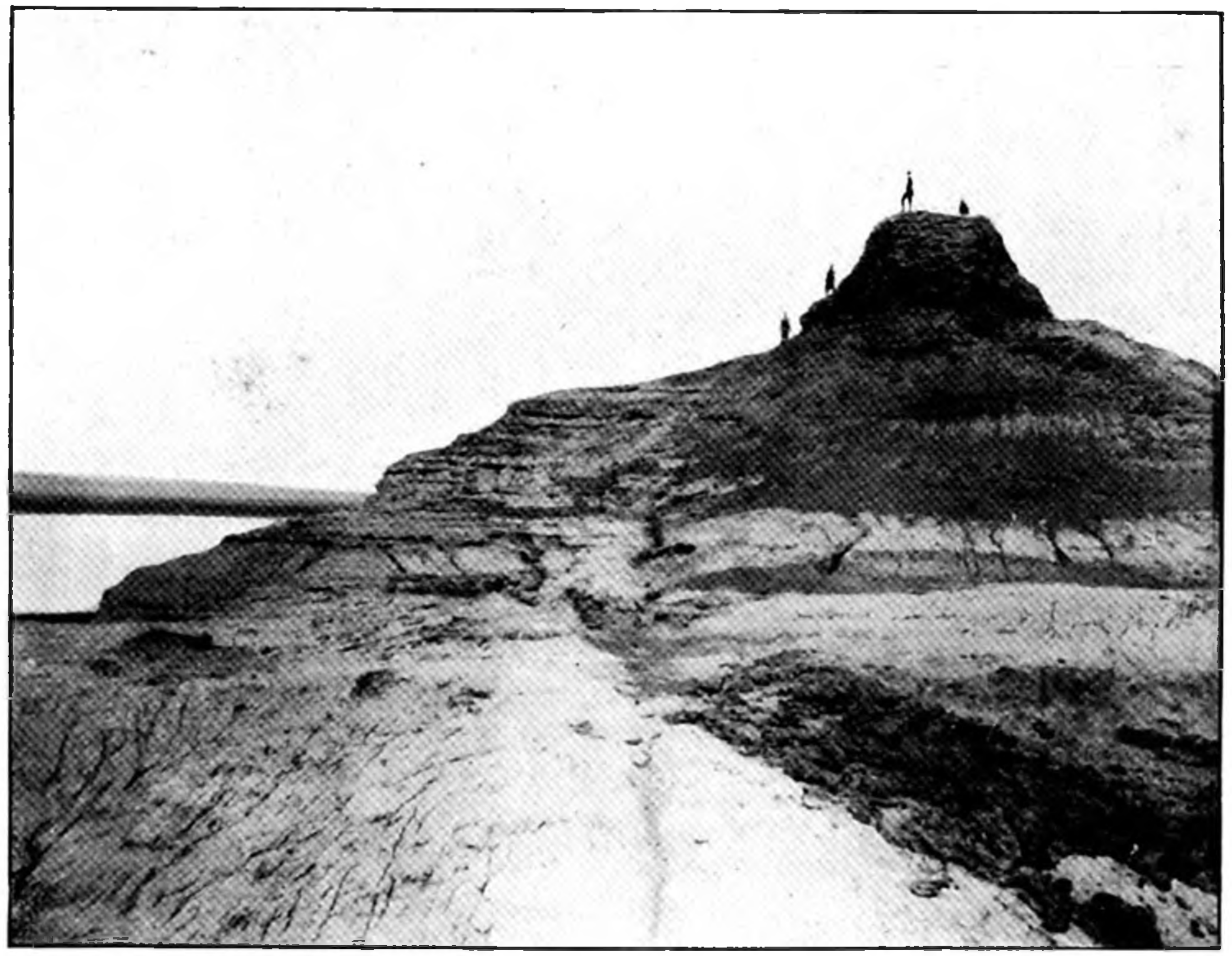


187. CLAY TERRACES AND MARSHY DEPRESSION TO WEST OF ANCIENT WATCH-TOWER T. XIV. a (A), TUN HUANG LIMES.



188. VIEW FROM ANCIENT WATCH-TOWER T. XIV. a, TUN-HUANG LIMES, TOWARDS NORTH-WEST.

189. REMAINS OF ANCIENT BORDER WALL TO SOUTH-WEST OF WATCH-TOWER T. XIV. a, TUN-HUANG LIMES.



190. ANCIENT WATCH-TOWER T. XX TUN-HUANG LIMES, SEEN FROM SOUTH-WEST.

render the height of the whole main structure still more impressive. Its walls, in spite of the decay they had suffered, especially on the south face, still rose in places to about 25 feet, being highest on the north side of the central hall. The small figures of men seen in the photograph at different points in front of the building will help to convey some scale.

Purpose of building puzzling.

Either on account of erosion undercutting the base or of some other cause, considerable portions of the south walls of the halls had fallen. These masses of clay had covered up the face of the base in some places, while in others the drainage of occasional rainfall, escaping on this side, had scooped out deep hollows in the floor and base. All this made it difficult to ascertain where the main entrances of the three big halls and the stairs once giving access to them might have been, or to make quite sure that there were no remains of any. I was struck, however, from the first by the absence of large windows such as halls of this great size would have needed for their proper lighting. Curiously enough, the parts of the walls still standing, both on the north and on the south, were instead pierced at fairly regular intervals by triangular openings, about 3 feet high and about as wide at the base, one row being on a level flush with the floor and another about 14–15 feet above it. Five of them could be traced below in the north wall of both the central and the western halls. Obviously they must have been intended not so much for lighting as for ventilation. No remains could be traced of internal fittings or arrangements which might have suggested the purpose of the whole building. A plastered platform or plinth, about a foot wide and 8 inches high, which on clearing the interior was found to run along the foot of the north wall in the western and central halls, except in front of the triangular openings, did not furnish any clue.

Inner enclosure with towers.

Nor was direct guidance as to the purpose of the main building to be derived from any structural remains that could be traced around it. On the north side, and less clearly on the east, there survived portions of what appeared to have been an enclosing wall of stamped clay, about 5 feet thick and built parallel to the walls of the main structure at about 40 feet from its base. Fig. 182, on the right, shows the least injured segment of this enclosure on the north side. To the west, below the steeply cut face of the clay ridge previously referred to, there was no clear indication of such an inner enclosing wall, and along the south face I felt sure from the look of the level foreground that it had never existed. Yet the intention of an inner enclosure or court for the big building was plainly indicated by towers of stamped clay, massive but apparently not uniform in plan, of which the remains rose at the four corners, marking a rectangle about 560 feet long outside and nearly 200 feet across. The south-west tower, seen on the left of Fig. 186, still stood to a height of about 20 feet. The north-west one, less well preserved, occupied a small detached clay terrace, and is seen also in Fig. 182, on the left. The plan (Plate 41) shows that the three towers which adjoined still traceable walls were built within the inner enclosure. This fact clearly suggested that they were meant, not for defence against attack from outside, but as points of vantage for sentinels posted to guard the building—or, rather, its contents.

Remains of outer enclosure.

Apart from this inner enclosure there survived also remains, far less distinct, of an outer one in the shape of two badly decayed mounds running parallel to the south and north faces of the building. The one to the north ran about 80 feet outside the inner enclosing wall. The mound or embankment on the south kept at a distance of over 100 yards from the base of the building, thus leaving a big open court in front of it. Owing to the subsoil being moist through the vicinity of the marshes, the material composing the mounds had decayed into mere earth, and their original construction could not be determined. Near what seemed the centre of the south mound there was a gap about 40 feet wide which I thought might mark a gateway. Wind-erosion may account for the disappearance of corresponding remains of an outer enclosure on the east and west sides, where I could not trace any mounds.

Scanty finds within interior of halls.

In the absence of any definite structural indications, the hope of solving the puzzle presented by this imposing ruin seemed to rest upon any records or other finds that might be brought to light by excavation. For such the interior of the halls seemed from the first to hold out but scant promise; for owing to the hollows scooped out on the south by the drainage, as already mentioned, the original flooring had been washed out over great parts. Elsewhere, too, there was a striking absence of miscellaneous refuse, such as usually marks prolonged ancient occupation of stations on the Limes. In the end, our laborious clearing of the accumulations of sheep-dung and drift-sand, which covered the original floor along the foot of the north wall in places to a height of 8 feet or so, was only rewarded by seven fragmentary wooden slips found on or near the low plinth in the north-west corner of the central hall (T. XVIII. ii) within a small layer of refuse. The clearing was carried along the whole of the north side of the western and central halls, but could not be extended into the eastern one. There large portions of the north wall had completely fallen and buried the floor under heavy masses of clay, which could not be attacked with my small posse of labourers. The two records from ii included in M. Chavannes' publication, *Doc.* Nos. 416, 417, relate to individual soldiers from Ho-nan and Kan-su, but give neither dates nor a clue to the character of the ruin.

Records from refuse in inner court.

I had hoped to come upon deposits of rubbish in the fairly well protected narrow court that extended within the inner enclosure on the north side. But it was searched in vain until at last, on scraping the ground below the slope of the little terrace bearing the tower in the north-west corner (i), a heap of refuse was struck composed mainly of reed straw and ashes. From this forty inscribed pieces of wood and bamboo were recovered, and nearly twice as many blank bamboo slips, all much worn and repeatedly scraped, evidently representing 'waste paper' which had been prepared for fresh use as palimpsest writing-material. A dozen uncut wooden sticks, of flat shape, looked as if intended to be split up into slips. Some of them were of the wood of a conifer, and had evidently been brought from a distance to be used as stationery, the nearest place where such wood could be found now being in the Nan-shan south-west of Kan-chou.[4]

Records relating to granary.

Most of the inscribed tablets had suffered much from moisture, and it was not until the very last piece, T. XVIII. i. 40, *Doc.*, No. 413 (Plate XII), was extracted and cleaned that Chiang Ssŭ-yeh discovered the precise date for which we were eagerly looking. It proved to correspond to the year 52 B.C., and thus made it certain that the ruin dated back to the early occupation of the Limes under the Former Han. The doubt about the character of the big ruin was removed when my learned secretary, after a minute scrutiny, had made sure that two among these records distinctly referred to transactions connected with a granary. In the course of the days spent here over survey and excavation the thought had already occurred to us both, as well as to Naik Rām Singh independently, that this strange pile might have been erected for the purpose of serving as a supply-store to the troops stationed or moving along the wall, and to officials and political missions travelling by the desert route.

Structure intended for magazine.

In the light of the documentary evidence thus obtained, it became easy to recognize a simple explanation for all the structural peculiarities above noted: the big size of the halls quite unsuited for habitation, especially in the winter; the small openings intended mainly for ventilation; the choice of a building site conveniently accessible and near water, yet well raised above the adjoining ground to be safe from damp; the arrangements of the two enclosures, obviously meant to facilitate the guarding of the building, not against hostile attack, but against theft. Thus we can fully account, too, for two striking features of the base of natural clay provided for the structure. Its height and steep face would help to protect the supply-stores from rodents, a possible cause of loss

[4] For specimens of records from T. XVIII. i written on such wood, see *Doc.* Nos. 415, 418, Pl. XII.

quite as great as that to be apprehended from human pilferers. This protection could be made particularly efficient by leaving the base without stairs or other means of access except such as might be provided only on occasions when supplies had to be moved in or out. The hard clay besides lent itself very readily to a little undercutting of the outer face of the base, which would help to keep off mice or rats.

Magazine use confirmed by documents.

In view of this close agreement of the purely structural indications, it is specially gratifying that M. Chavannes' analysis of the still legible records from this site, *Doc.* Nos. 413–27, has fully confirmed the inference drawn from those two documents. One of them, *Doc.* No. 418 (Plate XII), is an order for the issue of grain signed by three officials apparently in charge of the granary. Still more significant is *Doc.* No. 415 (Plate XII). This is a formal receipt for two cart-loads of grain, of specified kinds and weights, delivered at the granary from a particular area of cultivation within the Lung-lo sub-prefecture of Tun-huang, evidently as a contribution towards the commissariat requirements of the Limes. We have already seen that the Former Han Annals place both the 'Yang and Yü-mên barriers' within the Lung-lo sub-prefecture.[5] The reference made in the fragmentary record T. XVIII. i. 40, *Doc.*, No. 413 of 52 B.C., to two carts may also be supposed to concern such a delivery. Elsewhere, in No. 421, apparently an incomplete wooden label, we find mentioned twenty suits of a particular quality such as a military magazine might store. Other fragmentary documents from T. XVIII. i seem to contain communications, private or official. One of them, No. 424, may yet deserve further attention, as it refers to an order issued by a certain high official 'to those who administer the command of Chiu-ch'üan (Su-chou)'.[5a]

Advanced base of supplies of Limes.

Any one familiar, from historical study or personal experience, with the serious difficulties to be faced in moving large bodies of men over desert ground or in maintaining them there must realize the advantages offered by such an advanced base of supplies both for the troops which guarded the Limes on this desert border and for the military expeditions, political missions, and caravans which had to pass along it, whether going to or coming from Lou-lan. Considering the number of troops and the frequency and size of the missions which the notices of the Former Han Annals mention as having followed this difficult desert route, especially during the early period of Chinese expansion westwards under the Emperor Wu-ti,[6] we can fully appreciate the need of such ample accommodation for stores as this imposing building provided. As I looked towards the ruined magazine from the track of the ancient Lou-lan route which edges the gravel plateau on the south, and twenty centuries ago had served as the main artery for Chinese trade and political effort westwards, there came back to my mind the thought of the huge sheds and 'commissariat godowns' which are a familiar sight to the traveller approaching Peshawar from the east. They contain the military stores kept ready for an advance, if ever its need may arise, by the one great route which connects India with Kābul, and thence with Central Asia. Yet even the most barren parts of the Khyber route might seem like a garden when compared with the desert through which those Chinese troops of Han times had once moved towards Lou-lan.

Remains near great magazine.

The size and solidity of construction make it appear very probable that the great magazine dated back to those times when the Lou-lan route first came into military use and the line of the Limes was extended to protect it. In those days the site must have seen busy scenes, and quarters for guards and administrative *personnel* are also likely to have stood there. In view of what we know of the effect of wind-erosion or moisture, it is easy to realize why the remains of all such less permanent structures outside the main ruin had completely disappeared, except on a small clay terrace beyond the south-east corner of the inner enclosure, where layers of refuse were found, and below them

[5] Cf. above, p. 621.

[5a] For No. 425, a text fragment, see below, p. 764.

[6] Cf. Wylie, *Notes on the Western Countries*, *J. Anthrop. Inst.*, x. pp. 25, 70 sqq.; also below, pp. 725 sqq.

the foundations of a room about 15 feet square, partly dug out of the solid clay, partly walled. Besides a few miscellaneous objects, including two woven string shoes, a *Wu-chu* coin, and a wooden die, T. xviii. iii. 003 (Plate LIII), there was found here a fragmentary wooden record, *Doc.* No. 414, also dated 52 B.C.[7] In addition, I need only mention a ruined watch-tower built on the edge of the gravel plateau which overlooks the site from the south. It rises only to about 12 feet in height and seemed of inferior construction, being built of layers of coarse clay separated by reeds at intervals of 3 or 4 inches. Owing to its position it is visible from a considerable distance, and may have been erected as a signal station or road-mark. The ruined magazine itself, in spite of its great size, cannot be sighted from afar because it is placed low down in the marshy basin.

Watch-tower above ruin.

Magazine remembered in Tun-huang tradition.

We have no direct archaeological or documentary evidence for settling the approximate date at which the magazine ceased to be occupied. It is, however, obvious that its use could not well have continued beyond the period when the garrisoning of the Limes stations ceased, about the middle of the second century A.D. Fortunately the very size of the ruined structure seems to have assured it attention in the local tradition of Tun-huang, and to this circumstance we owe brief references made to it in two treatises of T'ang times that deal with the *mirabilia* and other local topics of Tun-huang. Both are preserved in manuscripts recovered from the walled-up temple library of the 'Thousand Buddhas'. One of these is the *Tun-huang lu*, which Dr. Giles has translated from a booklet in my collection, and to which reference has already been made. There we read: 'The town of *Ho-ts'ang* is 230 li north-west of the city. In ancient times a military magazine stood there.'[8] There cannot, I think, be any doubt that the ruined magazine of T. xviii is meant here.[9] The bearing to the north-west of Tun-huang town is correct, and the distance of 230 li indicates as close an approximation to the actual distance along the route shown by Map No. 78, viz. 50 miles, as we can possibly expect. I have already given abundant evidence to prove that the *li*, as used by the Chinese of T'ang times for road measurement in Central Asia, corresponds to about one-fifth of a mile.[10]

Ruined town *O-ts'ang* mentioned in *Sha chou chih*.

The other text containing a mention of our ruin is the *Sha chou chih*, which Professor Pelliot brought away from the 'Thousand Buddhas', and which Mr. Lo Chên-yü subsequently published in his *Tun huang shih shih i shu*. According to Dr. Giles's note, the *Sha chou chih* states of the 'ancient town of *O-ts'ang* 阿倉 (as the name is there written)' the following: 'It is 242 li north-west of Tun-huang, and is usually called the town of O-ts'ang. Its date is unknown. The place is in ruins, but the foundations still remain.' A further statement of the text is quoted by Dr. Giles to the effect 'that its walls were only 180 paces in circumference'. It is easy to see that the description given by the *Sha chou chih*, a text dating also from T'ang times but apparently somewhat older than the *Tun-huang lu* (Mr. Lo Chên-yü, as Dr. Giles informs me, assigns to it the approximate date of A.D. 713–42), is perfectly correct if taken to refer to the ruined magazine of T. xviii. The bearing and distance agree, as well as the dimensions given for the walls. The block of three big halls which must be meant measures about 1,000 feet in circumference, and to this the estimate of 180 double paces—for such are obviously intended—corresponds accurately enough. It is of interest to note that the term *ts'ang* 倉 found in the name, as recorded by both texts,

[7] The site-marks of *Doc.* Nos. 426, 427 have been misread, and ought to be T. xviii. i. 10, 12; not T. xviii. iii. 10, 12.

[8] Cf. Giles, *Tun Huang Lu*, *J.R.A.S.*, 1914, p. 722. I am informed by Mr. A. D. Waley that the name as written in the *Tun-huang lu* (see p. 14, as reproduced *loc. cit.*, p. 728) is *O-ts'ang* 阿倉, and therefore identical with the form found in the *Sha chou chih*. [But see Dr. Giles's remark in *Add. & Corr.*]

[9] Dr. Giles himself was 'much tempted to identify the military magazine with the huge ruined structure' T. xviii, of which I had already given a fairly detailed account in *Desert Cathay*, ii. pp. 127 sqq. But, owing apparently to a misapprehension as to the distance indicated in the texts, he inclined in the end to the conclusion that 'our author has made a mistake in locating the magazine at O-ts'ang'.

[10] See above, pp. 320, 559; 649, note 12.

means 'granary'. This proves that local tradition was in T'ang times still fully aware of the true character of the ruins. That both texts should speak of the big ruin as an old 'town' can cause no surprise to any one familiar with the fact that every ancient ruin, however small, is spoken of in Chinese Turkestān as a *kōne-shahr*, or in the Kan-su marches as a *chiu ch'êng* ('old city').

Section VIII.—THE LAKE SECTION OF THE LIMES, T. xix–T. xxiii

Limes walls to north-east of magazine.

The position chosen for the great magazine of the Limes was rendered particularly secure by the wide marsh-bed which, as already mentioned, extended to the north of it and made a defensive line of wall quite needless on that side. But on the east I found the wall reappearing on a tongue of firm ground which separates that marsh bed from a lake about 3 miles long and about half as wide. The gap between the marsh and the lake was not much over a mile in width, but care had been taken to close it by means of two watch-towers, T. xix and T. xx, and a connecting wall. The wall was badly decayed, but the towers were conspicuous ruins (Fig. 190), being perched on the top of isolated steep clay terraces up to 100 feet in height, of which a number lay scattered over this stretch of ground. A reference to the map, Plate 33, shows that the cluster of these Mesas forms here, as elsewhere, but the continuation of a narrow plateau projecting from the gravel 'Sai' on the south, which the interacting forces of water and wind-erosion have broken up at its northernmost end. The same obvious explanation applies also to similar formations of isolated clay terraces which the line of the Limes crosses near T. ix, xiv. a, xxii. b, c, and which in each case we find guarded with special care. This is accounted for by the facilities which such broken ground would otherwise have offered for unobserved attack.

Watch-tower T. xix.

The tower T. xix (Plate 36) occupied a naturally strong position at the northern extremity of a steep-faced clay ridge commanding a full view of the lacustrine depression through which the Su-lo Ho passes here. From its height I first clearly sighted the deep, well-defined channel by which the river enters the above-mentioned lake from the side of the Khara-nōr and again leaves it westward to feed the marsh-bed north of the magazine. The tower, built of bricks of the usual size with intervening layers of brushwood, measured 22 feet square at the base, and contained a small guard-room, i, 8 feet square. On the east a narrow apartment, ii, adjoined, which may have served as a place for stores. On the same side the slope over which the tower was approached from a narrow neck of the ridge was covered with plentiful refuse, containing *inter alia* a quantity of chopped reed straw still green and fresh looking. Here, too, were found scanty remains of a room partly cut into the live clay, and a stack of fascines made up of Toghrak twigs, together with a big coil of twisted reed rope, about $1\frac{1}{2}$ inches in diameter, the use of which remained doubtful. Among the miscellaneous objects found in this refuse and within the little guard-room I may mention three feathered arrow-shafts, T. xix. i. 6, 006–007 (Plate LIII); the well-preserved barbed arrow-head, i. 005 (Plate LIII); and the implement of hard wood, i. 003 (Plate LII), which may have served for applying and smoothing wall plaster.

'Chu-chüeh company at *P'ing-wang*.'

Of the wooden records recovered from the débris of the ruined tower, the neatly written label T. xix. i. 6, *Doc.*, No. 693 (Plate XIX), is of antiquarian interest. It specifies that the bag or box to which it was originally attached contained a hundred bronze arrow-heads of a particular kind belonging to the '*Chu-chüeh* company at P'ing-wang' 平望, and thus makes it appear very probable that the section of the Limes bearing the latter name extended so far eastwards. The name of the 'Chu-chüeh company of P'ing-wang' had already been found in T. xv. a. ii. 9, *Doc.*, No. 484.[1]

[1] See above, p. 699.

Finds at watch-tower T. xx.

The ruined watch-tower T. xx (Fig. 190) was reached after tracing the decayed line of wall for about three-quarters of a mile towards the shore of the previously mentioned lake. It was built on a knoll rising at the north-east end of a Mesa to a height of about 70 feet above the foreshore. The brick masonry still stood intact to a height of about 13 feet. From the débris of four small rooms, the foundations of which could be traced at different points of the steep slopes immediately below the top of the knoll, more than a dozen wooden records (*Doc.* Nos. 661–72) were recovered. In one of them, No. 662 (Plate XIX), a certain commandant of a post on P'ing-wang is referred to by name. Among the miscellaneous relics found here may be mentioned a neatly made burnisher of wood and bone, T. xx. i. 002, and a small wooden block, i. 001, evidently intended for a seal-case, but left unfinished. On the slope below the tower a *Wu-chu* coin of an early type, assigned to the first century B.C., was picked up.

Water-level and vegetation show little change.

From the north-eastern end of the clay ridge bearing T. xx the Limes wall was clearly traceable for over 50 yards towards the edge of the lake's marshy foreshore, which was on a level only 5 feet lower than the bottom of the wall, and was evidently still liable to periodical inundation. The further fall of the ground to the actual surface-level of the lake was only 2 or 3 feet more. The evidence here available agreed with observations made at other points, such as near T. x and T. xi, where the wall abutted on lakes or marsh-beds. It proved that the change in the water-level since ancient times could not have been very great. That the local conditions of soil and climate had undergone here but little change during the last two thousand years was shown also by another curious fact. The whole of the level ground between the two towers, and on either side of them to marsh-bed and lake, was covered with a luxuriant jungle of wild poplars—just as it is likely to have been in the times of the Emperor Wu-ti; for the wall here proved to be constructed, not with the usual reed fascines found elsewhere along the line of the Limes west of Tun-huang, but with layers of Toghrak branches, the material still the most conveniently at hand on the spot.

'Wet border' formed by marsh belt.

From the way in which the line of the wall ran straight out to the foreshore of the lake, almost at right angles, it was easy to see that the lake and the wide marsh belt adjoining it eastwards were intended as a kind of 'wet border' line to replace the wall of the Limes for some distance.[2] This inference is supported by the fact that I could find no trace of a wall along the southern shore of the lake and the marsh belt for a distance of over 7 miles. But that this stretch of ground was, all the same, kept under watch and guard is proved by the towers T. xxi and T. xxii. a. Both of them are built on isolated high Mesas rising quite close to the shore of the marshy area and commanding an open view across it northward.

Tower T. xxi.

T. xxi proved to be a badly decayed tower occupying the western end of the top of a very steep clay ridge, which rises to a height of over 80 feet just north of the caravan track and about 3 miles east-south-east of T. xx. The present height of the masonry was about 10 feet, and the bricks were of the usual size, about 17 × 8 × 5 inches. A small knoll had been used as a natural base for the tower, and, together with the height of the ridge, assured both safety and wide outlook. Two small apartments adjoining the east face contained only reed-straw, evidently intended for fodder, still green and in wonderful preservation (for specimens see T. xxi. 001, 002).

Watch-post T. xxii. a.

At a distance of close on 3 miles east-north-east from the last post I found the top of a small clay terrace, about 80 feet high, occupied by the remains of the ruined watch-tower T. xxii. a. It

[2] This use of a 'wet border' line for defence finds its exact parallel in the earliest policy with regard to the Roman Limes; for Augustus and his immediate successors systematically aimed at making rivers, lakes, or the sea the defensive frontier line of the empire; cf. Kornemann, *Die neueste Limesforschung*, *Klio*, 1907, pp. 78–81. The difference between the two kinds of border is, as Prof. Kornemann points out, pregnantly expressed by Tacitus, *Agricola*, xli (*de limite imperii et ripa*), and in a passage of Spartian's *Vita Hadriani*, xii. 6 (*in plurimis locis in quibus barbari non fluminibus sed limitibus dividuntur*).

was roughly built of hard salt-permeated clods of clay, such as might still be obtained from the *shōr*-covered marsh edge close by. Layers of Toghrak twigs were inserted to strengthen this coarse masonry, which still rose to a height of some 13 feet. No remains of quarters survived, apart from a small underground room measuring 11 by 9 feet, cut into the clay to a depth of 5 feet a little to the east of the tower. From the refuse outside it came the complete inscribed slip T. XXII. a. i. 1, *Doc.*, No. 302 (Plate IX), and the fragment of another, No. 303, was found in a large heap of dung and ashes some 20 yards from the tower.

Outflow from Khara-nōr.

After skirting the edge of the marsh belt north-eastwards, a stretch of firm ground was reached, covered with erosion terraces from 20 to 30 feet in height and having elsewhere a surface of fine gravel or drift-sand. It was easy to see, as Map No. 78. A. 3 also shows, that this stretch of ground marks the northern end of a well-marked tongue-like plateau, which runs out from the gravel 'Sai' in the south. The plateau, together with a corresponding low spur meeting it from the foot of the Kuruk-tāgh, forms the natural barrage which holds up the Su-lo Ho waters in the Khara-nōr basin. This barrage is about 2 miles across, and in its lowest part northward probably liable to occasional flooding; for when on May 13, 1907, I searched for and found the actual outflow of the river in the north-west corner of the lake, the deep-cut bed of the former, only 20 yards wide but quite unfordable and carrying a volume of water of at least 1,500 cubic feet per second, was filled almost to the brink. At other seasons a crossing could, no doubt, be effected here without difficulty owing to the firmness of the banks, and this explains why the line of the Limes wall had been carried across the barrage from the west shore of the Khara-nōr to the wide marshy belt on the other side.

Limes wall between T. XXII. b, c.

The line of the wall, marked by a low straight mound, could be made out only where it crossed bare patches of coarse sand between the towers T. XXII. b and T. XXII. c. Elsewhere it had disappeared completely on finer soil overgrown with scrub. The line, as marked by the towers, had been drawn about 1½ miles to the south of the Su-lo Ho outflow. T. XXII. b was a badly decayed tower built with bricks on the top of a small terrace about 20 feet high and 30 to 40 feet across. The masonry stood only to a height of about 13 feet, and was too much broken to allow exact measurement of the plan, which seems to have included small quarters adjoining on the south and west.

Documents found at T. XXII. b.

From the refuse which had been thrown down the cliff southward sixteen inscribed wooden records were recovered. One of these, T. XXII. b. 9, *Doc.*, No. 272 (Plate IX), is dated A. D. 12. Another, *Doc.* No. 274 (Plate IX), is of interest as it refers to a list of government arms belonging to the Ch'ing-tui company of *P'ing-wang*. The recurrence of the latter name also in T. XXII. b. 10, *Doc.*, No. 275, and in T. XXII. c. 22, *Doc.*, No. 271, conclusively proves that the P'ing-wang section of the Limes extended as far east as these stations close to the Khara-nōr. Local interest attaches also to the square tablet, *Doc.* No. 278 (Plate IX), which in big characters names the 'fire signal of the *Ta-wei* 大威 barrier', and evidently was intended to be affixed to a wall. No. 273 describes itself as a notification concerning troop movements, 'to be hung up in the [several] *t'ing* of the barrier', but does not give their names.

Watch-tower T. XXII. c.

The tower T. XXII. c occupied the highest point of a small isolated ridge of clay rising at a distance of about a furlong from the actual shore of the Khara-nōr. An earlier shore-line, 4 or 5 feet higher, approached the position of the watch-station even closer. The ruined tower, built of stamped clay with intervening layers of reeds, was badly decayed, and was only 10 or 11 feet high. No quarters could be traced apart from the remains of a small room partially cut into the clay of the terrace. But at the south foot of the latter, where a small ravine descends the steep cliff, I discovered a considerable accumulation of refuse, about 16 feet in diameter and up to 4 feet in height. From masses of reed-straw and stable refuse there emerged here over two dozen records on wood and a large number of fragmentary fabrics, mainly silk, in great variety

Earliest Limes record, 98 B.C.

of colours and makes. Among the documents T. XXII. c. 22, *Doc.*, No. 271 (Plate IX), claims special interest, as it is the earliest of all records from the Limes, bearing a clearly written date corresponding to 98 B.C. In it, too, reference is made to P'ing-wang, the section of the Limes previously discussed. In Nos. 279–88 we have a series of daily returns specifying the number of men out of a squad of ten horsemen employed on various duties, such as mounting guard, cooking, and making bricks.

Patchwork of figured silk fabrics.

Among the very numerous fragments of fabrics silks prevail, but other materials, such as wool (T. XXII. c. 002), cotton (? , c. 009), and perhaps the paper mulberry fibre (c. 004), are also represented. The most interesting piece, however, is the patchwork, c. 0010 a (see Plates LV and CXVIII for drawing of design), made up of small strips of a figured silk in indigo and yellow-green. The elaborate pattern has been fully analysed by Mr. F. H. Andrews in the Descriptive List. It contains figures of dragons, birds, and phoenixes set in highly conventional scroll-work, and other ornamental designs. The general style and treatment are unmistakably Chinese, as may reasonably be expected in a decorated silk dating from Han times, when China still claimed the monopoly of producing textiles of that material. The extremely fine weaving attests the high technical level reached in this essentially Chinese manufacture. The piece claims importance as one of the oldest specimens of textile art undoubtedly Chinese, and the indications it furnishes as to style and technique have since received striking confirmation from the abundant finds of brocades, dating from Han times, which I discovered in 1914 at cemeteries of the Lou-lan area.[3] In view of the early date of the specimen and the certainty of its origin, it is all the more interesting to find in it certain elements of design, like the four birds grouped round what suggests a conventional tree, foreshadowing motifs which we are apt to consider as characteristic of textile art in the Persia of Sassanian times and in the Near-Eastern regions influenced by it.

Interest of textile design.

Tower T. XXII. d across Khara-nōr.

Looking in the evening from T. XXII. c across the green expanse of the Khara-nōr eastwards, I could sight no other ruined tower beyond except T. XXII. d, some five miles away by the southern shore of the lake. It was the last day, May 13, 1907, which I could spend over work by the Limes, and the distance from camp precluded a visit then. So the clearing of this ruin, and the search for other remains which might link the westernmost portions of the Limes now explored with those I had first surveyed to the north-east of Tun-huang, had reluctantly to be left for the future. The occasion for filling this gap duly came when I returned once more to Tun-huang by the ancient Lou-lan route nearly seven years later. The work was then successfully achieved, but its description must be left for the report on my third journey.

Signal-tower T. XXIII.

There was one more ruin, however, which, as it lay actually by the caravan route, I could visit when on my way back to Tun-huang. It comprised the two towers T. XXIII and T. XXIII. a, perched in a conspicuous position on the extreme northern end of a narrow plateau jutting out towards the Khara-nōr. There the route to Tun-huang emerges from broken ground on an open marshy plain skirting the south-eastern shores of the lake, and itself turns to the south-east. The upper tower, T. XXIII, occupies a very narrow and steep crest, which affords no space whatever for quarters but, rising about 110 feet above the plain, commands a distant view to the north and east. T. XXII. d was visible from the foot of this tower, but could not be sighted from the lower one, T. XXIII. a. So the idea suggests itself that the former was built merely for signalling, or possibly was added subsequently when the inadequacy of outlook from T. XXIII. a had been realized. T. XXIII appears to have measured originally about 16 feet square at the base, but much of the coarse masonry had fallen down the steep slope, and the remaining portion stood to a height of only 10 feet. The material consisted of salt-impregnated lumps of clay with fascines of brush-

[3] For a very curious figured fabric from Ch'ien-fo-tung, Ch. 00118 (Pl. CXI), recalling this style, see below, chap. XXIV. sec. ii.

wood inserted after every five courses. No refuse whatever, not even potsherds, was to be found near this tower.

T. XXIII. a guarding route.

About 150 yards off to the north, and on the last and almost completely isolated offshoot of the same ridge, rises the lower tower T. XXIII. a. It directly overlooks the caravan route which winds round the foot of the ridge before turning due west towards Yü-mên or south-east towards Tun-huang. As the ground immediately to the north is much broken by small ridges, the route may be said to pass here through a well-marked defile, and this accounts probably for a post having been built to watch it. My surveys of 1914 have furnished additional reasons for the belief that the post marked by the towers T. XXIII and T. XXIII. a served this special purpose and did not lie on the actual line of the Limes, which passed north of it, keeping closer to the foreshore of the lake.[4]

That its origin and occupation was, however, contemporary with the Limes was made quite clear both by the structural features of T. XXIII. a and the relics brought to light there. The tower was built of bricks, measuring 14 by 7 inches and 4 inches thick, with the usual intervening layers of reed straw. It measured 16 feet square at its foot, and contained, at a height of 8 feet above its natural clay base, a guard-room 8 feet square. Owing to the broken condition of the walls and the steepness of the slopes but little débris survived here. However, in a small gully to the south and some 30 feet below the tower considerable refuse-heaps were found, proving prolonged occupation of the post. Evidently the sheltered spot had been used for the accommodation both of men and of beasts. Among the few finds made in the masses of straw and dung, the fragment of a fabric, T. XXIII. a 002, deserves mention, as its material has been proved by Dr. Hanausek's analysis to be cotton. Within a small chamber cut into the clay cliff adjoining this rubbish there was found the fragment of a record on paper, *Doc.* No. 708 (Plate XX), relating to some movement of soldiers. Its material, exceptionally soft and of felt-like appearance, suggests an early phase of paper manufacture, and therefore would well deserve expert analysis. A small inscribed wooden label (not traceable at present) was recovered from the refuse outside.

Refuse-heap below T. XXIII. a.

Extreme aridity of climate.

The fact that all this perishable litter had remained undisturbed at the bottom of the gully, though in the very line where any drainage would descend, afforded striking proof of the extremely scant rainfall which this desert region could have witnessed during and since the occupation of the Limes. It is to the exceptional aridity of the climate prevailing here for the last two thousand years that we owe the abundance of ancient remains brought to light by my explorations along the Tun-huang Limes, and with this observation I may fitly conclude their detailed description.

[4] As mentioned above, p. 576, note 4, these later surveys have shown that the delineation in Map No. 78. B. 3 of the ground east and north of T. XXIII, previously based on an imperfect single traverse, requires modification in various respects. The Khara-nōr extends considerably further to the east, and the positions of T. XXIII. b, c must be shifted northward. Near those stations the line of the Limes wall was traced with ease in 1914.

CHAPTER XX

HISTORY AND RECORDS OF THE TUN-HUANG LIMES

Section I.—THE EXTENSION OF THE 'GREAT WALL' BEYOND TUN-HUANG

Historical importance of Limes records.

Our survey of the remains of the Tun-huang Limes, as detailed in Chapters XV–XIX, has abundantly demonstrated how much help for the explanation of archaeological and topographical details is furnished by the early Chinese records which were brought to light there in the course of my explorations, and which M. Chavannes' critical acumen and unsurpassed powers of work have rendered accessible to research. They are the oldest extant Chinese manuscripts at present known, and their historical importance is considerable. The value of the results which their thorough treatment in M. Chavannes' *Documents chinois* has yielded for Chinese antiquarian, palaeographical, chronological, and kindred studies needs no exposition here. It has been set forth very clearly by M. Chavannes himself in his *Introduction*,[1] and has, since the publication of that volume, been fully recognized also by all competent Sinologists. Not less do they recognize the exceptional difficulties which had to be overcome in the decipherment and elucidation of those records.

Information on history of border-line.

As far as the interpretation of individual archaeological finds and the determination of questions affecting the ancient topography of the Limes were concerned, I have already endeavoured to make proper use of the evidence which M. Chavannes' translation and analysis of the documents have furnished. But there still remains the task of reviewing any general information bearing on the history and conditions of China's westernmost border wall that can be gathered from the original records, as well as from the notices in the Han Annals and other texts which M. Chavannes has collected in his *Introduction*. By examining this information in the light of the facts which actual exploration on the ground has revealed, we may hope to realize better the organization which created and maintained this portion of the ancient 'Great Wall' on the desert marches of Kan-su, and to restore a picture of the life once led there. To these preliminary remarks it may be well to add that, while I am myself indebted to M. Chavannes' invaluable publication for whatever use I can make here of the original records and texts, the archaeological facts gathered by me from actual observation were only partially accessible to M. Chavannes at the time when his volume was written. This will help to explain the instances where, in the application of the data furnished by the documents from the Tun-huang Limes, I have been led to conclusions which to some extent differ from the inferences drawn by M. Chavannes.

First creation of 'Great Wall'.

The notices reproduced in M. Chavannes' *Introduction* from the Former Han Annals and other Chinese historical sources[2] show clearly the relation between the Limes with which we are here concerned and the older system of border defence which was intended to protect China further east from barbarian incursions. In 214 B.C. the Emperor Shih Huang-ti, of the Ch'in dynasty, linked up the defensive lines by which the feudal kingdoms of the North had endeavoured to

[1] Cf. Chavannes, *Documents*, pp. vii sqq.

[2] Cf. Chavannes, *ibid.*, p. v.

protect themselves against the inroads of the Hsiung-nu, or Huns, and thereby first created the famous 'Great Wall'. As then established, it extended from Shan-hai kuan, on the Gulf of Liao-tung, westwards as far as Lin-t'ao, corresponding to the present prefecture of Min, in the extreme south of Kan-su and about 110 miles south of Lan-chou.[2a]

North-western extension of 'Great Wall'.

It was not until a century later that the 'Great Wall' received an extension to the north-west, notable both for the boldness of its far-flung line and the significant change in its purpose. In Ch'in Shih Huang-ti's border wall a policy of consolidated defence had found its expression. The construction of the lines of the Limes, carrying the 'Great Wall' about a thousand miles further and almost to the easternmost edge of the Tārīm Basin, was meant to serve a new policy: this took the offensive and definitely aimed at expansion into Central Asia. We have already had more than one occasion to refer to the far-reaching results of Chang Ch'ien's memorable Central-Asian mission (138–126 B.C.) under the great Han Emperor Wu-ti.[3] Originally undertaken for the sake of securing possible allies against the Hsiung-nu in the Yüeh-chih, the later Indo-Scythians, whom the Hsiung-nu had driven from their old seats on the Kan-su marches into Central Asia, this mission first revealed to the Chinese the commercial importance of the great western civilizations. It also showed clearly that the geographical and political conditions prevailing in the Tārīm Basin made it possible there to open for Chinese trade a direct and safe route of access to Ta-yüan or Farghāna, Sogdiana (K'ang-chü), and the Oxus regions.

Chang Ch'ien's report on route into Central Asia.

Chang Ch'ien's report to the Emperor, as recorded in the *Ch'ien Han shu*, rightly emphasizes the fact that communications with the Ta-hsia or Bactria were at the mercy of the Hsiung-nu on the north and of the Ch'iang or Tibetans on the south. Only in passing straight between them lay safety from attacks of both nomadic nations.[4] In the light of our present geographical and historical knowledge it is easy to realize fully the soundness of Chang Ch'ien's recommendation and of the Imperial policy which soon gave effect to it. As soon as the Chinese had gained the gap of Tun-huang, where contact between Hun and Tibetan raiders ceased, there stretched westwards before them the absolute desert of Lop, difficult to cross but safe from human attack; and Chinese policy has always been readier to face the dangers of nature than to fight elusive barbarian foes. Beyond the Lop Desert the two great routes of the Tārīm Basin lay open, leading westwards to the desired goal. The great stretches of desert ground and the oases between them, which had to be passed through on these routes, were equally unsuited for nomadic occupation. The small but thoroughly civilized settlements established in the oases could offer no serious resistance to aggression in any case. In fact, they were bound to welcome effective Chinese control, which would assure protection from inroads of troublesome neighbours across the mountains to the north and south-east and bring lucrative trade in its train.

Easy high road along north foot of Nan-shan.

To Tun-huang, at the same time gate and base for the Chinese advance into the Tārīm Basin, nature had provided only one main route from China on the south-east, but that remarkably easy and safe. Its line leads along the foot of the well-watered north-eastern and northern slopes of the great Nan-shan range, and it is followed to this day by the great high road connecting China proper with Chinese Turkestān for purposes of trade and administration. Between Lan-chou and Liang-chou the easternmost extension of the main Nan-shan is crossed by an easy pass, open for

[2a] It is of interest to note that, as M. Chavannes has duly pointed out, this Great Wall of Ch'in Shih Huang-ti is clearly marked in the Chinese map engraved A.D. 1137 but based on earlier sources, which he edited in *B.E.F.E.O.*, 1903, pp. 214 sqq.

We shall see further on that the same map also marks the Han Limes east and west of Tun-huang; see below, p. 735, note 30.

[3] Cf. above, pp. 336, 553, 580. For a full translation of the Memoir of Chang Ch'ien, contained in the Former Han Annals, see Wylie, *J. Anthrop. Inst.*, x. pp. 66 sqq.

[4] See *ibid.*, x. p. 67.

cart traffic. Beyond Liang-chou no natural difficulties of any sort are encountered, as the road passes from one fertile tract to another. Abundant streams, fed by the perpetual snowfields of the Nan-shan, water these submontane tracts and render them capable of supporting a fairly close population. The volume of the two main rivers of Kan-chou and Su-chou, which gather most of these streams, is large enough for their united course to penetrate a considerable distance northward into the desert region of Southern Mongolia. To the east of Kan-chou a notable change in climatic conditions permits cultivation to be carried on along the foot of the mountains even without irrigation.[5]

Natural protection of road along Nan-shan.

Relatively narrow as this fertile submontane belt is, stretching from Liang-chou to Su-chou,[5a] its produce is amply sufficient to provide for the needs of any number of men and animals that trade and military movements might bring along it. But what must have made this great natural thoroughfare still more advantageous for the Chinese advance towards Central Asia is the protection it enjoys from physical features on both flanks. All along it to the south-west rises the high snowy Richthofen chain, like a mighty rampart. The very few alpine tracks which cross it are easily guarded against inroads from Tibetan nomads in the narrow gorges through which they debouch towards the foot of the mountains.[6] On the other flank, to the north-east, stretches the western Ala-shan hill chain, relatively low but extremely barren, and beyond it a wide desert area, largely drift-sand. Through this, as I had occasion to convince myself in the course of my explorations in 1914, only small parties could ever penetrate, owing to the great scarcity of water and grazing.[7] Beyond Su-chou, the cultivable area along the great route becomes restricted to a succession of small oases.[7a] This is due to the limited chances of irrigation which the increasing aridity of the outer chains of the western Nan-shan allows here. But the physical conditions securing protection on both flanks continue much the same, and suitable stages, habitable and amply provided with water and grazing, are to be found along the ancient highway right through to the big Tun-huang oasis.

Border commands from Liang-chou to Tun-huang.

This brief survey of geographical features will help us to understand better the direction taken by the Chinese conquests after the Emperor Wu-ti had decided upon his policy of expansion towards the Tārīm Basin. It fully explains also the line which the extension of the Chinese Limes wall followed in rapidly advanced stages. After the severe defeat inflicted upon the Hsiung-nu by the successful campaigns of the general Ho Ch'ü-ping, the regions which correspond to the present Liang-chou and Kan-chou were, in 121 B.C., brought under Chinese control. First, as M. Chavannes concludes from a comparison of the several Chinese historical records, the command of *Chiu-ch'üan* 酒泉 was instituted in 115 B.C. in the locality represented by the present Su-chou.[8] It appears to

[5] Cf. my *Third Journey*, etc. *Geogr. Journal*, xlviii. p. 199. For a synopsis of the general features of this submontane region, see also below, chap. XXVII. sec. iii, iv.

[5a] Cf. Maps Nos. 88, 91, 93.

[6] Cf. regarding these defiles and the Chinese *chiusas* which were built to guard them, *Desert Cathay*, ii. pp. 257, 263, 268 sq., 302, 331; also below, chap. XXVII. sec. i–iii, *passim*.

[7] Cf. *Geogr. Journal*, xlviii. pp. 196 sqq. The only route practicable for a large force bent on striking the Lan-chou–Tun-huang road from the north, and thus forcing its way into the north-west provinces of China proper, leads along the Etsin-gol, the terminal course of the rivers of Kan-chou and Su-chou. I found this threatened gate of invasion, through which Chingiz Khān passed on his first conquest of Kan-su in 1226, duly guarded by the remains of the ancient Han Limes which I traced north of Mao-mei; cf. *loc. cit.*

Colonel Kozloff's surveys in 1899–1901 and 1908–9 have done much to clear up the topography of this portion of the Southern Mongolian 'Gobi'; for his travel experiences there, cf. *Geogr. Journal*, 1910, Sept., pp. 303–5.

[7a] See Maps Nos. 81, 83, 85, 86, 88.

[8] Cf. Chavannes, *Documents*, p. v, note 5, for the passages of the Former Han Annals and other texts bearing on the progressive organization and settlement of the newly conquered territories. The removal from them of the original inhabitants is distinctly recorded in chap. XCVI of the *Ch'ien Han shu*, as translated by Wylie, *J. Anthrop. Inst.*, x. p. 22.

have played a prominent part in the operations which resulted in the progressive settlement of Chinese military colonies along the great highway towards Tun-huang and the Tārīm Basin.[9] The development of the new territories soon after led to the separate command of *Wu-wei* 武威 being created in what is now Liang-chou. In 111 B.C. these two commands were again subdivided by the establishment of the commands of *Chang-yeh* 張掖, the present Kan-chou, and *Tun-huang* 敦煌. In 119 B.C., as we are told by the *Ch'ien Han shu*, the Chinese had already passed to the north of the Huang Ho and established irrigation works and military colonies, to the total strength of fifty–sixty thousand men, as far west as Ling-chü 令居. This locality corresponds to the present P'ing-fan 平番, a sub-prefecture on the high road leading from Lan-chou towards Liang-chou. It is from this point onwards that the construction of a wall extending to the west is distinctly recorded in Chapter XCVI of the Former Han Annals, immediately after the first conquests of 121 B.C.[10]

Western extension of 'Great Wall' to serve Chinese 'forward policy'.

The Annals do not inform us as to the exact line which this earliest portion of the western extension of the 'Great Wall' followed, and in the absence of archaeological evidence it would be useless at present to attempt conjecturally to trace it as far as Mao-mei, on the Etsin-gol. This was the easternmost point up to which I was able to explore the ancient Han Limes in 1914.[11] But there can be no doubt that its main purpose was to protect the great highway opened for trade, and soon also for political expansion, into Central Asia. It is equally obvious that this Limes was also meant to assure more safety to the military colonies which were planted in the submontane tracts traversed by the great route. Their agricultural produce was essential for making this long line of communication practicable for trade caravans and troop movements. The wall of the Emperor Wu-ti was thus distinctly intended to serve as the instrument of a 'forward policy' conceived on a big scale, and the analogy it thus offers to the earlier Limes systems of the Roman Empire is most striking; for it is a fact well established by modern antiquarian researches that the lines of the Roman Limes were originally integral portions of the great strategic road system of the Empire. That the word *limes* served as the technical term for military roads pushed forward from a base of operation seems to me the best justification for the use I have made of it throughout to designate this western extension of the Chinese Great Wall.[12]

Line of posts and forts established to *Yü-mên*.

The Chinese historical sources do not inform us of the progress made or the successive stages reached by the Emperor Wu-ti's extension of the wall before the year 108 B.C. At that time we are told that 'a continuous line of posts and small forts was established from Chiu-ch'üan or Su-chou as far as *Yü-mên*, or the Jade Gate'.[13] This record at once raises the question as to the position

[9] Cf. Wylie, *J. Anthrop. Inst.*, x. p. 22: 'The region of Chiu-ch'üan was first established, and afterwards gradually the people were removed in to fill it.'

[10] See Chavannes, *Documents*, p. vi, note 1; Wylie, *J. Anthrop. Inst.*, x. p. 22.

[11] See *Third Journey of Exploration*, *Geogr. Journal*, xlviii. p. 196. The line of the wall which our modern maps mark, in a fashion not always consistent, as running from Lan-chou to Su-chou, more or less parallel to the high road and to the north-east of it, may safely be assumed to be of the same late mediaeval origin as the wall I examined for considerable stretches between Su-chou and Kan-chou in 1907 and 1914; cf. *Desert Cathay*, ii. pp. 275 sq., 336; *Geogr. Journal*, xlviii. p. 200; Maps Nos. 88, 91, 93, and below, chap. XXVII. sec. ii, iv. But later as this wall undoubtedly is and purely defensive in character, yet it helps to illustrate the importance which Chinese policy continued to attach to the safety of these advanced north-west marches of Kan-su, even after its control of the Tārīm Basin had long ceased.

[12] For a very lucid and comprehensive review of the principles underlying the earliest Limes constructions under Augustus and Tiberius, cf. Prof. E. Kornemann's paper *Die neueste Limesforschung*, in *Klio*, vii. (1907) pp. 76 sqq. For detailed evidence the authorities quoted there in the notes may be consulted. Here the briefest reference must suffice to such significant terms in the classical authors as *limitem agere*, *limitem aperire* for the opening of such strategic routes; *castra in limite locare*, etc.

It is clear that the military roads guarded by a continuous chain of posts, such as modern policy on the Indian North-West Frontier has found it necessary to push forward, e.g. through the Khyber and up the Kurram, Tochi, and Gomal valleys, fully deserve to be considered as *limites*.

[13] Cf. Chavannes, *Documents*, p. vi, note 3, where the

then occupied by that famous frontier station, and this question is one which, on account of its historical interest and its bearing on the archaeology of the Limes, must claim special consideration here. That the 'barrier' known as the Jade Gate 玉門 had received its designation from the jade, *yü* 玉, which since the earliest times formed the most precious of the imports from Central Asia into China, has always been fully recognized by Chinese antiquarians and Western scholars alike.[14] But critical inquiry as to the varying positions which it undoubtedly occupied at different periods has become possible with real profit only since my systematic exploration of the remains of the ancient Han Limes.

Ssŭ-ma Ch'ien's reference to the Jade Gate.

In the preceding chapter I have been able to show at length that the evidence of dated documents, combined with that of archaeological and topographical observations, proves the site of T. XIV on the Limes to mark the position where the headquarters station of the Yü-mên barrier was established in and after 96 B.C., if not for some years earlier.[15] But M. Chavannes, while fully recognizing the strength of this evidence, has drawn attention to an interesting passage in Ssŭ-ma Ch'ien's history which, if its literal interpretation must be accepted as decisive, would indicate that this was not the earliest position of the famous Jade Gate.[16] The passage relates to the return in 103 B.C. of the general Li Kuang-li, with the scanty remnant of his forces, from the first and unsuccessful expedition he had led against the kingdom of Ta-yüan or Farghāna. 'The Son of Heaven having learned [of Li Kuang-li's failure] was much enraged; he sent emissaries to close the Jade Gate and declared that all those of the army who would venture to pass [the gate] would at once be decapitated. The general of Êrh-shih [i.e. Li Kuang-li] was afraid and therefore remained at Tun-huang.'

First position of *Yü-mên* east of Tun-huang.

It is obvious that Ssŭ-ma Ch'ien's statement, if exact, presupposes that the Jade Gate, and with it the most advanced section of the Limes, was in 103 B.C. still at some point east of Tun-huang. The fact that, as we shall presently see, the construction of the Limes beyond Tun-huang is not recorded until after events belonging to 102–101 B.C. raises a strong presumption in favour of the statement. But it is not yet possible definitely to determine the point where the Jade Gate was situated in the years immediately preceding. Judging from what my surveys of 1907 have shown me, together with the actual exploration of the remains of the Limes between Su-chou and An-hsi carried out in 1914, it appears to me that there are only two points along this line at which topographical and other local considerations would have allowed an important frontier station, at 'rail-head' as it were of the Limes, to be established with advantage. One is the point near the hamlet of Shih-êrh-tun (Map No. 85. A. 2), some 15 miles north of the present Yü-mên-hsien, where the Limes wall coming from north of Su-chou first approaches the Su-lo Ho, close to the sharp westward bend of the river. I shall have occasion in a subsequent chapter to describe the remains found at this point, which curiously enough include a small but massive fort recalling the one at T. XIV.[16a]

almost contemporary record of Ssŭ-ma Ch'ien is quoted in the original. The corresponding passages in the *Ch'ien Han shu* show that this reference to the extension of the Limes is made in connexion with Chao P'o-nu's expedition against Lou-lan and Turfān, 108 B.C.; see Wylie, *J. Anthrop. Inst.*, x. pp. 25, 71, and above, p. 336.

[14] For the views held by the latter, cf. e.g. Richthofen, *China*, i. p. 36, where, however, the word *yü*, 'jade', is erroneously assumed also to be contained in the name of the present Chia-yü kuan near Su-chou (cf. below, chap. XXVII. sec. i). There are plentiful disquisitions on the question of *Yü-mên* in later Chinese antiquarian literature, including an essay ascribed to no lesser a personage than the Emperor Ch'ien-lung. But they are not accessible to me in translation, and there seems no reason to assume that, as far as the earliest period is concerned, these learned inquiries carried on in the study disposed of historical sources other than those still available. It is obvious that in order to attain any approach to exact determination of the localities it was an essential preliminary to investigate the remains of the Limes and its topography directly in the field.

[15] See above, pp. 689 sqq.

[16] Cf. Chavannes, *Documents*, p. vi, note 4.

[16a] Cf. below, chap. XXVII. sec. v.

If the Limes really had for some years its temporary head at this place, the marshy ground to the south and along the right bank of the Su-lo Ho near its bend would have provided an effective flanking defence. I may add that the route surveyed in 1914, which passes from Shih-êrh-tun to Su-chou, keeping north of the rugged hill chain represented in Maps Nos. 86, 88, is quite as practicable and about as long as the present high road from Yü-mên-hsien to Su-chou.[17]

The other point which may come into consideration here as a likely position for the Jade Gate of 103 B.C. is the defile between Bulungir (also Bulunjir, Pu-lung-chi) and An-hsi (Map No. 83. B. 2), where the Su-lo Ho passes the foot of the low barren hill-chain of Wan-shan-tzŭ on its left bank and an outlying ridge on its right.[17a] It is the only defile along the whole Su-lo Ho course after the river's debouchure from the mountains, and it is particularly easy to watch and defend. It was, no doubt, for this very reason that the point was selected by the military engineers of the Emperor Wu-ti for bringing the line of the Limes across the Su-lo Ho. On the right, or northern, bank I succeeded in 1914 in tracing the line of the Limes wall, badly decayed as it is here, close to the foot of the outlying ridge above mentioned, which still bears a watch-tower of Han times. On the steep slopes of the opposite southern bank, where the line of the Limes must have had its continuation, I found no surviving traces of the ancient wall. But a series of watch-towers of later date, crowning the successive small spurs where the present high road from Bulungir to An-hsi passes this much-broken ground (see Map No. 83. B. 2), proves that the defile was specially guarded long after the ancient Limes was abandoned. About 12 miles further on, to the west of the small oasis of Hsiao-wan, the remains of the Han wall and towers could be followed again quite clearly over the bare gravel glacis running in the direction of An-hsi.

Su-lo Ho defile at *Wan-shan-tzŭ.*

I consider that the defile just described offered a position eminently suitable for a main frontier station guarding the highway from the Tārīm Basin until the westward extension of the Limes to the terminal basin of the Su-lo Ho was accomplished. In support of this belief I may point to two local observations. Only about 12 miles to the east of the Wan-shan-tzŭ defile, and thus within striking distance, we find the large but now almost wholly abandoned circumvallation of Bulungir, which during Manchu times, even after the Chinese reconquest of Eastern Turkestān, was occupied by a considerable frontier garrison.[18] Then again, immediately below the point where the road coming from Bulungir first ascends the Wan-shan-tzŭ spurs, and close to the left river-bank, there is a group of ruined Chinese temples, known as *Lao-chün-miao*, all wrecked since the great Tungan rebellion, but still objects of local worship. Their position, far away from inhabited ground, points to the early sanctity of the site, and, in view of what I had occasion to explain above about the special tenacity with which local worship clings to all places where routes passed outside the ancient line of the Limes,[18a] the surmise readily suggests itself that the site originally derived its sanctity from the vicinity of an ancient 'Gate'.

Likely position of *Yü-mên*, 103 B.C.

[17] Whether the name *Yü-mên-hsien* borne by the small town and district headquarters south of Shih-êrh-tun (Map 85. A. 3) is of great age, and whether it is based on some kind of local tradition or mere antiquarian conjecture, are questions into which I am unable to inquire at present. I did not hear of any old remains within or close to the oasis. It is, however, well placed for cultivation, canals from the debouchure of the Su-lo Ho affording irrigation. Hence the occupation of the locality by a military colony may have recommended itself from an early date. Local antiquarian opinion, as communicated to me by Chiang Ssŭ-yeh, seemed to identify Yü-mên-hsien with the old *Chin-ch'ang* 晉昌; for the latter cf. Chavannes, *Dix Inscriptions*, p. 67, note 2, and below, chap. XXVI. sec. ii.

[17a] Concerning this defile and its tactical importance, see below, chap. XXVII. sec. v.

[18] Bulungir must have been a place of importance to have given its name (apparently of Mongol origin) to the Su-lo Ho, which often figures as the 'Bulungir River' in European maps.

The small fortified town of *Ch'iao-wan-ch'êng* (Map 83. D. 2), situated on the right bank of the river about 10 miles to the east-north-east of Bulungir and just within the ancient Limes wall, must have served a similar purpose as a frontier garrison. Its solid walls and structures, said to have been built by the Emperor Ch'ien-lung, were reduced to ruins during the last great Tungan rebellion.

[18a] Cf. above, pp. 602, 696; also below, chap. XXVI. sec. ii.

Limes advanced beyond Tun-huang, 101 B.C.

Wherever the Jade Gate may have been situated in 103 B.C., it is certain that this important frontier station must have been advanced within a very few years after that date to the site of T. XIV on the Limes west of Tun-huang. We know from the concordant record of Ssŭ-ma Ch'ien and the Former Han Annals that immediately after the great success achieved by Li Kuang-li's second expedition against Ta-yüan (102–101 B.C.) the Limes was pushed forward beyond Tun-huang. By that exploit Chinese prestige among the states in the 'Western Regions' was greatly raised. 'Most of them sent envoys to China with offerings of tribute; while the Han imposed office on more of the Western region potentates.'[19] Thus there followed at once a rapid increase in the diplomatic relations of China with the West, and in trade also. In order to safeguard the passage of envoys and of caravans, and to assure supplies for them *en route*, it is stated that 'military posts were established from place to place from Tun-huang westwards to the Salt Marsh'.[20] That the construction of the line of the Limes beyond Tun-huang must be meant here is made perfectly clear by the result of my explorations along it. The discovery of exactly dated documents, such as the one of 98 B.C. at the watch-tower T. XXII. c (*Doc.* No. 271) and of those ranging from 96 to 94 B.C. at the site of the Yü-mên headquarters, T. XIV (*Doc.* Nos. 304-6, 308, 309), affords conclusive confirmation of the chronological accuracy of the historical records.

Western-most extension of Limes reached by 96 B.C.

The last-named documents leave no doubt that the Limes reached the site of T. XIV, and that the Jade Gate was established there, by 96 B.C., if not several years earlier. Considering that one of these documents, No. 304, of the year 96 B.C., mentions [*Ta*]-*chien-tu*, the name borne by the westernmost section of the Limes proper comprising the watch-stations T. IV. a–c,[21] and that a record actually found at T. IV. b (*Doc.* No. 430) bears a date which can safely be read as corresponding to 94 B.C., I feel justified in concluding that the extension of the Limes following Li Kuang-li's second expedition must have been carried right through to the extreme end of the wall by 96 B.C., if not earlier.

Rapid construction of Limes wall.

This rapid construction of the Limes wall and watch-stations over absolute desert in the course of a few years can cause no surprise. Great as the physical difficulties must have been on ground bare of all resources and over considerable distances even devoid of water, the historical records show us how well prepared Chinese military organization at this period was to overcome them. When Li Kuang-li set out in 104 B.C. for his first expedition against Ta-yüan, a force of 10,000 men raised in China was dispatched with him by the Lop Desert route. Not more than one or two tenths of those who had set out are said to have returned then.[22] Yet two years later, on Li Kuang-li's start for his second expedition, we read of military movements on a much bigger scale proceeding along this most difficult route. 'There marched out of Tun-huang a force of 60,000 men, not including camp followers, accompanied by 100,000 cattle and upwards of 30,000 horses,' etc. It is but reasonable to suppose that a certain portion of this force was utilized for the construction of the Limes beyond Tun-huang, which would help to safeguard the army's line of communication and facilitate its provisioning.[23]

By the extension of the 'Great Wall' beyond Tun-huang, which resulted in the placing of the Jade Gate headquarters at T. XIV, the last forward step had been taken on the Limes which was

[19] Cf. Wylie's translation from the *Ch'ien Han shu*, *J. Anthrop. Inst.*, x. p. 22. See also Kingsmill, *Intercourse of China*, etc., *J.R.A.S.*, 1882, pp. 28 sq.

[20] Cf. Chavannes, *Documents*, p. vi, with note 5. The text there quoted assigns the construction of these military posts to the year 101 B.C.; see also Wylie, *J. Anthrop. Inst.*, x. p. 22.

[21] See above, pp. 636, 648, 691.

[22] For a rendering of the account in Ssŭ-ma Ch'ien's *Memoirs*, chap. CXXIII, cf. Kingsmill, *Intercourse with China*, *J.R.A.S.*, 1882, pp. 23 sqq.

[23] According to Ssŭ-ma Ch'ien the Chinese army on its arrival at Ta-yüan 'numbered some 30,000 men'. When, on its return in 101 B.C., it entered the Jade Gate, it is stated to have been 'about 10,000 strong, with a thousand horses'; see Kingsmill, *loc. cit.*, pp. 25, 28.

meant to protect the great route of commercial and political expansion westwards. It was a step of the kind which in the case of the Roman Limes lines is appropriately described by the term *castra* or *praesidia promovere*.[24] I have already explained in full detail the topographical reasons which caused the Emperor Wu-ti's military engineers to carry the line of their wall to T. IV, on the very edge of the marsh-filled terminal basin of the Su-lo Ho, and to make it finally end there.[25] At no other point could they have found a better flanking defence provided by nature itself for their Limes. In this termination of the wall, just as in the clever use made of the line of the Su-lo Ho lakes and marshes for a 'wet border',[26] they displayed the same clear eye for topography which we have so often had occasion to recognize in the old Chinese leaders and organizers. Though among the documents found at the isolated watch-stations T. v–T. VI. d along the eastern edge of the terminal Su-lo Ho basin none date back further than 68 B.C. (*Doc.* No. 255), yet there is reason to believe that this chain of posts watching the south-west flank was established about the time at which the wall was carried to T. IV. a.[27]

Limes ends at terminal basin of Su-lo Ho.

The same undoubtedly holds good of the short line of watch-towers pushed out beyond the end of the wall and represented by the ruins of T. I and T. II. It was plainly intended to assure additional security for the exposed western end of the Limes proper. These small advanced posts made it easier to watch the main route coming from the west, the only one really practicable for serious inroads, and to send on warning signals, etc. M. Chavannes has justly pointed out the exact analogy presented by the system of fortified outposts which the Romans employed in their African provinces, notably on the Tripolitan border, where the routes leading through the desert towards the oases of the coast belt required to be guarded. There too, as M. Cagnat's very instructive exposition of the Tripolitan Limes clearly shows, this system served a policy of expansion beyond the actually protected area.[28] The same observation applies also to the numerous lines of advanced posts traceable beyond the other desert Limes of the Roman Empire, that of the Province of Arabia.[29]

Watch-posts advanced beyond Limes wall.

We have seen above that the historical record relating to the year 101 B.C. distinctly mentions the establishment of military posts (*t'ing* 亭) 'from place to place from Tun-huang westwards to the Salt Marsh (*yen-tsê* 鹽澤).' That by the latter term Lop-nōr or the dried-up ancient Lop sea is meant may, on M. Chavannes' authority, be accepted as certain.[30] Yet I must point out that I could not trace any ruins of watch-towers or other remains of structures going back to Han times along the ancient route to the west of T. II. However, my explorations of 1914 enabled me to trace the ancient route itself to and across the dried-up salt sea of Lop, as briefly mentioned above,[31] and the observations then gathered along it about the physical conditions prevailing on this

Military posts established to 'Salt Marsh'.

[24] Cf. Kornemann, *Klio*, 1907, vii. p. 77: 'Die neuen Einfallslinien wurden durch Kastelle von Auxiliartruppen . . . gesichert, an der Kopfstation durch ein besonders umfangreiches Kastell. . . . Jede neue Eroberung brachte eine Verlängerung des Limes und eine Vorschiebung der Kastelle: *castella* oder *praesidia promovere*.'

[25] See above, pp. 632 sq.

[26] Cf. above, pp. 663 sq.

[27] See above, p. 647.

[28] Cf. R. Cagnat, *La frontière militaire de la Tripolitaine à l'époque romaine*, in *Mémoires de l'Académie des Inscriptions*, xxxix. pp. 100 sqq. (reprint pp. 28 sqq.).

[29] Cf. Kornemann, *Die neueste Limesforschung*, *Klio*, vii. pp. 112 sq. I may note here that the detailed surveys of the Arabian Limes recorded in Brünnow and v. Domaszewski's great work, *Die Provincia Arabia*, offer an abundance of interesting material for the comparison of its *burgi*, or watch-towers, fortified camps, etc., with the remains of the ancient Limes of Tun-huang.

[30] See *Documents*, p. vi; cf. also Wylie, *J. Anthrop. Inst.*, x. p. 22; Kingsmill, *J.R.A.S.*, 1882, p. 29. It deserves to be noted that another designation of the Lop-nōr marshes *P'u-chang* 蒲昌海, is also to be found in the Former Han Annals; cf. Chavannes, *T'oung-pao*, 1905, pp. 531, 570. [If the term *Yen-tsê* were not used in other passages also for Lop-nōr, the suggestion might be hazarded that the terminal marsh basin of the Su-lo Ho may be meant by it in the passage quoted in the text.]

[31] Cf. above, pp. 341 sq., 553 sq.; also *Third Journey of Exploration*, *Geogr. Journal*, xlviii. pp. 127 sqq.

forbidden ground make it possible to account for the absence of structural remains. In any case we have seen that the *Wei lio* mentions the '*Chü-lu* granary' in a position corresponding to the present stage of Bēsh-toghrak, two marches beyond T. IV or the 'Well of the Protector-General'.[32]

Han posts in Lou-lan and beyond.

Still more conclusive is the fact that in 1914 I discovered, close to the north-west edge of the dried-up salt sea of Lop, the ruins of a fortified camp or *point d'appui*, constructed in the characteristic fashion of the Tun-huang Limes wall and unmistakably going back to the same early period.[33] Its description must be left for the detailed report on my third expedition, and so also an account of the series of ancient stations and watch-towers examined in 1915 along the Konche-daryā towards Korla, which certainly mark the continuation of the old Chinese high-road beyond Lou-lan. Archaeological evidence induces me to attribute them to Han times, and probably to the first effective opening of the route beyond Tun-huang. The fact that the establishment by the Chinese of military agricultural colonies at Lun-t'ai and Chü-li, localities between Kuchā and the Konche-daryā,[34] is mentioned in the *Ch'ien Han shu* and by Ssŭ-ma Ch'ien in connexion with the extension of the Limes beyond Tun-huang shows clearly how far the operations then undertaken were pushed along the great highway westwards.

Section II.—THE TUN-HUANG LIMES SINCE ITS CONSTRUCTION

We may now briefly review the information that can be gathered about the history of the Chinese Limes after it had reached its westernmost extension. No direct data are available in our textual sources apart from what the Annals tell us about the successive later phases of China's Central-Asian policy under the Former and Later Han dynasties. Fortunately we are able to add to these general indications the documentary and archaeological evidence derived from the exploration of the Limes itself. The large series of dated documents extending from 68 B.C. to about the middle of the first century B.C. may well be connected, as M. Chavannes thinks, with the very effective assertion of Chinese military power and political control in the Tārīm Basin which that period witnessed. The complete reduction of Lou-lan in 77 B.C. and the institution of a Chinese Protector-General in 60 B.C. to control both the southern and northern routes leading through the Tārīm Basin are outstanding features in that period.[1] But it must be remembered that most of those documents were found in the refuse-heaps of a single watch-station, a fact which introduces a certain element of chance into this chronological coincidence.

Abundance of Limes records before middle of first cent. B.C.

Absence of Limes documents, 39 B.C.–A.D. 1.

Some significance may, perhaps, be attached to the total absence of any documents dated between the years 39 B.C. and A.D. 1. During the reign of the Emperor Yüan-ti (48–33 B.C.) Chinese power in Central Asia was further consolidated, and the submission of various Hsiung-nu chiefs appears subsequently to have secured prolonged peace from those troublesome neighbours on the northern border.[2] The need for the military protection of the Tun-huang Limes was likely to have grown less then, and possibly the consequent reduction of detachments, etc., along the border

[32] See above, pp. 556 sq.

[33] Cf. *Geogr. Journal*, xlviii. p. 124, for a brief preliminary account.

[34] *Lun-t'ai* appears to be identical with *Wu-lei* 烏壘, which is repeatedly mentioned by the *Ch'ien Han shu* as the seat of the Chinese Protector-General of the Western regions after 60 B.C. Cf. Wylie, *J. Anthrop. Inst.*, xi. p. 95. It may be located at the present oasis of Bugur, east of Kuchā; see below, chap. xxx. sec. ii. Cf. also Chavannes, *Documents*, p. xiii.

Chü-li 渠黎 was a small territory situated probably to the south-west of Korla, between the Konche-daryā and Inchike-daryā; cf. Chavannes, *T'oung-pao*, 1907, p. 154, note 1; also below, chap. xxx. sec. ii.

[1] Cf. Chavannes, *Documents*, p. vii; *T'oung-pao*, 1905, p. 567; 1907, p. 154, note 1; also Wylie, *J. Anthrop. Inst.*, x. pp. 22, 27.

[2] Cf. Wylie, *J. Anthrop. Inst.*, x. p. 23: 'After the reigns of Suan-ti and Yüan-ti, the Shan-yü [paramount chief of the Hsiung-nu] was styled a border vassal, and the Western regions gave in their submission.'

may account for the want of 'office papers' from that period.[3] However this may be, the situation on the Tun-huang Limes must have undergone a marked change during the short weak reigns at the very beginning of the first century A.D. and during the usurpation of Wang Mang (A.D. 9–23) which succeeded them. We know from the Later Han Annals that in the years 6 B.C.–A.D. 5 there was a general break-up among 'the states of the Western regions', and that in A.D. 9 Wang Mang provoked a rupture between the Hsiung-nu and China.[4] In consequence of this we are told that 'the countries of the West conceived ill feeling and revolted; they broke off all relations with the Middle Kingdom and together they all submitted afresh to the Hsiung-nu'.

Troubles during Wang Mang's usurpation, A.D. 9–23.

M. Chavannes has rightly drawn attention to the relative frequency of documents belonging to the time of Wang Mang, and the conclusion seems certainly justified that during those years the border line must have witnessed considerable military activity. It was plainly due to the necessity of defence against inroads from the revolted territories in the north and west. The purely defensive character of the border policy then prevailing is fully borne out by the retrenchment of the western extremity of the Limes which archaeological evidence, mentioned above,[5] leads us to assume for that very period. We have seen that the outlying watch-stations on the south-west flank are likely to have been abandoned about the time of Wang Mang.[6] At the same time, or very soon after, the line of wall stretching from T. XIV to T. IV must have ceased to be occupied as a continuous defensive system, though outlying posts at certain towers west of the Jade Gate were probably maintained somewhat longer.[7] In the later wall, which was built at right angles to the original Limes to connect the Jade Gate with the 'Yang barrier', this policy of passive defence has left its visible mark. The obvious intention was to reduce the extent of line which had to be permanently watched and garrisoned, and thus to concentrate the force that was available for defence. Exactly parallel cases of retrenchment are to be found in the history of the Roman Limes systems during periods when internal conditions imposed upon the Empire a purely defensive frontier policy.[8]

Period of defensive frontier policy, A.D. 25–73.

Chinese power on the extreme north-west marches was even less able to assert itself during the first half-century or so which followed the accession of the Later Han dynasty in A.D. 25. The Limes as far west as the Jade Gate continued, indeed, to be guarded, as a fair number of documents with dates spread out between A.D. 35–77 prove.[9] But any attempt to re-establish order or imperial authority in the 'Western countries' was discountenanced from the capital, as a distinct record of the *Huo Han shu* tells us.[10] This policy of withdrawal and seclusion did not save the Chinese marches from being seriously disturbed by the Hsiung-nu, who during the Yung-p'ing period (A.D. 58–75) twice attacked Tun-huang and ravaged all the districts of *Ho-hsi* 河西, including also Su-chou, Kan-chou, and Liang-chou.[11]

[3] This explanation finds striking support in a passage which the Later Han Annals quote from a memorial on frontier policy addressed to the throne in A.D. 123. The memorialist points out therein that the policy pursued under the Emperors Suan (73–49 B.C.) and Yüan (48–33 B.C.) had 'secured subjects [beyond the administrative frontier] to take the place of a protective barrier; henceforth the gates of the passes were no longer closed; the winged (i.e. urgent) military orders no longer circulated'. Cf. Chavannes, *T'oung-pao*, 1907, p. 164, with an interesting note on the last words of the passage.

[4] Cf. Chavannes, *T'oung-pao*, 1907, p. 155.

[5] Cf. above, pp. 694 sq. [6] See above, pp. 647 sq.

[7] See above, pp. 636, 674, 694.

[8] Cf. e.g. Kornemann, *Klio*, 1907, vii. pp. 73 sqq.; Cagnat, *L'armée romaine d'Afrique*, pp. 680 sqq.; Brünnow and v. Domaszewski, *Die Provincia Arabia*, ii. *passim*.

[9] Cf. Chavannes, *Documents*, p. iii. It is, perhaps, significant that none of these records were found at T. XIV itself, while quite a number was yielded by the closely adjoining station, T. XV. a (*Doc.* Nos. 483–86, 535). For the reasons which probably explain the growing importance acquired since Wang Mang's time by this subsidiary 'Gate' on the 'New Route of the North', cf. above, pp. 705 sqq. Placed on the most direct line of approach from the Hsiung-nu territories, it must have been specially exposed to attack.

[10] Cf. Chavannes, *T'oung-pao*, 1907, p. 155.

[11] See Chavannes, *T'oung-pao*, 1906, p. 247; 1907, p. 156.

Chinese expansion westwards.

At last in A.D. 73 a policy of vigorous offensive was resumed which soon led to the political influence of the Empire making itself widely felt in the 'Western kingdoms'. The history of this renewed expansion of Chinese power into Central Asia is bound up with the glorious exploits of the great general Pan Ch'ao (A.D. 73-102), who established imperial control firmly over the whole of the Tārīm Basin and extended political relations beyond it even to Parthia.[12] In consequence of this successful 'forward policy' the importance attaching to the Tun-huang Limes and the need for guarding it must have greatly diminished. It is, no doubt, chiefly on this account that the period corresponding to China's farthest external effort under the Han is represented only by two dated documents from the Limes.[12a]

Route to Central Asia opened via Hāmi, A.D. 73.

But as an additional explanation it is well to keep in mind that this new Central-Asian advance was based largely upon I-wu 伊吾, or Hāmi, which was first occupied by the Chinese in A.D. 73.[13] The possession of this small territory was of particular importance, because it rendered it possible for the Chinese to reach Turfān and the regions north of the eastern T'ien-shan by a route far less beset with natural difficulties through want of water, grazing, etc., than either the ancient Lou-lan route or the 'New Route of the North'. This new route, which had its most convenient starting-point at An-hsi, has ever since remained the chief line of communication between Kan-su and Eastern Turkestān, whether for trade or military movements. Its line must have been substantially the same as that followed by the present high road from An-hsi to Hāmi.[14] For troops and caravans that came or went via Hāmi, Tun-huang lay henceforth off the direct route, and the consequent diminution of traffic by the ancient route leading past the Tun-huang Limes no doubt helped to reduce the importance of the latter.

End of Chinese control over 'Western countries'.

Some years after Pan Ch'ao's retirement (A.D. 102) Chinese control over the 'Western countries' was lost again. Tun-huang was endangered by Hsiung-nu incursions, and after an unsuccessful expedition to Hāmi in A.D. 119 the imperial government had to order the closing of the 'barriers of Yü-mên and Yang'.[15] A partial re-establishment of Chinese authority westwards was subsequently effected through the general Pan Yung, Pan Ch'ao's son, and it is of interest to note that his first operations in the winter of A.D. 123-4 were effected through Lou-lan.[16] But from the period A.D. 132-4 onwards the imperial prestige in the 'Western countries' gradually weakened again, and the year A.D. 153 is the last in which the Later Han Annals record Chinese military or political action to the north-west of Tun-huang.[17] We read of several expeditions undertaken from the side of Tun-huang between the years A.D. 135-51 against the chief of a Hsiung-nu tribe established north of the eastern T'ien-shan who constantly threatened the Chinese hold upon Turfān and Hāmi.[18] On one of these expeditions, in A.D. 135, we find the 'superintendent of the Yü-mên barrier' 三門關候 distinctly referred to as engaged under the governor of Tun-huang and by the side of the political officer of I-wu, or Hāmi. An interesting Chinese inscription, still preserved

[12] Cf. Chavannes, *T'oung-pao*, 1907, pp. 156 sqq. Pan Ch'ao's Central-Asian activity is fully detailed in the biography of this great soldier 'Political', translated by M. Chavannes, *T'oung-pao*, 1906, pp. 216-45.

[12a] Cf. *Doc.* Nos. 390, 537 of A.D. 87 and 94 respectively.

[13] See Chavannes, *T'oung-pao*, 1907, p. 156; for subsequent references to *I-wu* as an important military base, *ib.* pp. 158, 161, 167, 214. See also *Dix Inscriptions*, p. 19. As regards the exactly identical rôle which the Hāmi oasis played in the history of subsequent Chinese reconquests of Eastern Turkestān from T'ang times down to 1877, see below, chap. XXVIII. sec. ii.

[14] We shall see below, chap. XXVI. sec. ii, that when Hsüan-tsang started in A.D. 630 on his great adventure to the Western regions, he set out from Kua-chou, the present An-hsi, where the Jade Gate had by then been transferred, and made his way across the Pei-shan to Hāmi. Cf. also chap. XXVIII. sec. i, for the topography of Hsüan-tsang's route.

[15] Cf. Chavannes, *T'oung-pao*, 1907, pp. 160 sq.

[16] See Chavannes, *T'oung-pao*, 1906, p. 252; 1907, p. 167.

[17] Cf. Chavannes, *T'oung-pao*, 1907, pp. 214 sq.

[18] Cf. Chavannes, *T'oung-pao*, 1906, pp. 213 sq.

in a temple outside Barkul town, which M. Chavannes has edited and translated, records a great victory gained in A.D. 137 by a prefect of Tun-huang over the Hsiung-nu king Hu-yen, and claims that this secured order and calm for the frontier territory.[19]

Last dated record from Tun-huang Limes, A.D. 137.

It is this very year which has furnished us with the last accurately-dated document from the Tun-huang Limes, T. xv. a. i. 6 (*Doc.*, No. 536). The date A.D. 153 proposed for another record, *Doc.* No. 680, depends on an inferential calculation of a calendar, and is in any case not far removed from the latest certain date. Thus the records recovered from the ruined watch-stations bring us down to the period from which onwards historical notices of the Tun-huang Limes seem to cease in our accessible sources. Whatever the direct cause may have been, it seems safe to assume that the regular guarding of the wall and its towers did not continue beyond the middle of the second century A.D. The progressive disintegration of the empire under the last two Han emperors (A.D. 168–220), and still more during the 'Epoch of the Three Kingdoms' (A.D. 221–77), might furnish an adequate explanation for this. Or else some connexion may be sought with the receding danger from the Hsiung-nu, whose great westward movement was soon about to begin.

Continued use of Lou-lan route along Limes.

But if the line of the Limes itself fell into neglect, it was different with the route to Lou-lan which led along it. The discussion of this route above has shown us that its continued contemporary use is proved by the account of the *Wei lio* composed between A.D. 239–65.[20] We have also seen that, in the light of the conclusive evidence furnished by the dated documents found at the Lou-lan Site and ranging from A.D. 263 to 330, Lou-lan must be assumed to have retained a small Chinese garrison and a direct line of communication with Tun-huang and China right down to the first third of the fourth century A.D.[21] In one of these documents, the fragment of a letter dated A.D. 312 (*Doc.* No. 912), a departure from the 'Jade Gate barrier' is still directly mentioned. But whether this famous station was then still situated at T. XIV or had been moved nearer to Tun-huang, it is impossible to say. Fa-hsien on his journey in A.D. 400 to Shan-shan, i.e. the Charkhlik tract, must have passed by the caravan-track leading along the line of the abandoned Limes.[22] But though he correctly describes, as we have seen, the character of the desert crossed *en route*, he makes no mention of the Jade Gate.

Hsüan-tsang's *Yü-mên* located near An-hsi.

I am unable to trace any later reference either to the Tun-huang Limes wall or to the Jade Gate until we come to Hsüan-tsang's start for the Western regions, in or soon after A.D. 630. I shall have occasion below to discuss fully the interesting account which the great pilgrim's *Life* furnishes of his secret departure past the Yü-mên barrier.[23] Here it will suffice to point out that this account clearly places what was then locally known as the Jade Gate to the north of the old town of Kua-chou and on the left bank of the Su-lo Ho, not far from the present walled town of An-hsi. The five watch-towers pushed far out into the desert north-westwards which also figure in that narrative have to be looked for on the line of the still used road from An-hsi to Hāmi.[23a] But the watch kept there must in all essential points have closely resembled that which centuries earlier was maintained at the outlying guard-posts beyond the ancient Yü-mên.

Old *Yü-mên* remembered in T'ang times.

That nevertheless the old position of the Jade Gate was still remembered in T'ang times, at least in learned tradition, is proved by the interesting passage of the *Chiu T'ang shu*, already referred to, which correctly places Yü-mên 118 li to the north-west of Shou-ch'ang, the present Nan-hu, and thus exactly at the site of T. XIV.[24] That at Tun-huang itself popular notions on the subject were

[19] See Chavannes, *Dix Inscriptions*, pp. 17 sqq.

[20] See above, pp. 555 sqq.

[21] Cf. above, pp. 407 sqq.; Chavannes, *Documents*, p. iv.

[22] See above, p. 558.

[23] Cf. below, chap. XXVI. sec. ii; Julien, *Vie de Hiouen-Thsang*, pp. 17 sqq.; Beal, *Life of Hiuen-tsiang*, pp. 13 sqq.

[23a] Cf. below, chap. XXVIII. sec. i.

[24] See above, p. 621. The passage [*Chiu T'ang shu*, chap. 40, fol. 47 v°] is known to me only from Dr. Giles's paper on the *Tun-huang lu*, *J.R.A.S.*, 1914, p. 713.

Notice of ancient *Yü-mên* in *Tun-huang lu*.

less clear towards the end of the T'ang period or soon after is shown by the short text on the Mirabilia of Tun-huang, the *Tun-huang lu*, which Dr. Giles has edited and translated from one of our Ch'ien-fo-tung manuscripts. In this text, which probably belongs to the tenth century and cannot be older than the ninth, we read: 'West of the city [of Sha-chou or Tun-huang] is the Yang Barrier, which is the same as the ancient Yü-mên (Jade Gate) Barrier. . . . It connects China with the capital of Shan-shan, but the natural obstacles of the route and its deficiency in water and vegetation make it difficult to traverse. The frontier-gate was afterwards shifted to the east of Sha-chou.' [25] Evidently local popular tradition still vaguely remembered that the Jade Gate was once situated west of Tun-huang, though it erroneously identified it with the Yang Barrier. The notice, at any rate, is of some interest as definitely mentioning the shift of the 'frontier-gate' to the east which Hsüan-tsang's *Life* presupposes to have already taken place, and also as correctly describing the mountain route towards Charkhlik which passed through the Yang Barrier.[25a]

Reference to 'Great Wall' in *Tun-huang lu*.

Of much greater antiquarian interest for us is another passage which closes the *Tun-huang lu*, and which a notice of the *Sha chou chih* fortunately amplifies and corrects. 'The Great Wall, built under the Former Han dynasty, passes 63 li to the north of the city and runs due west out into the desert.' [26] We see here clearly that the remains of the Limes wall and its origin were still known to the people of Tun-huang about the tenth century A.D. The nearest point of the wall where it passed north of the Sha-chou town of T'ang times may be placed, according to my surveys of 1914, at a distance of about 16 miles, which agrees very closely with the 63 li of the text.

Description of Limes wall in *Sha chou chih*.

The fragment of the *Sha chou chih* which Mr. Lo Chên-yü has published from a Ch'ien-fo-tung manuscript in M. Pelliot's collection, and of which Dr. Giles has translated an extract in his note, adds to the above several very interesting details about the remains of the Limes which were known when this text was composed, apparently towards the close of the T'ang period or not very long after. They deserve to be quoted in full here: 'The ancient wall is 8 feet high, 10 feet wide at the base, 4 feet wide at the top. It passes 63 li north of Tun-huang and extends eastwards for 180 li to the Chieh-t'ing Signal-station 階亭烽, where it enters the territory of Ch'ang-lo hsien in Kua-chou; towards the west it reaches as far as the Chü-tsê (Winding Lake) Signal-station 曲澤烽, a distance of 212 li, running out into the desert due west in the direction of the territory of Shih-ch'êng 石城 (Charkhlik).'

Wall measures in *Sha chou chih*.

Both the measurements and the distances given appear to me to be based upon carefully collected local information. Taking the ruined wall first, we find a remarkably close agreement between the width indicated for it at the base and the actual measurements which I secured from different sections of the Limes. If we assume that the record of the *Sha chou chih's* informant was taken with a foot measure such as I excavated at T. VIII and T. XI, the 10 Chinese inches of which were equal to 9 British inches,[27] we get as the result of the equation $10 : 9 :: 100 : x$, a width in British measure of 90 inches, or 7 feet 6 inches, for the base of the wall. This shows a remarkably close agreement with the average of base measurements which I obtained at numerous points of the wall,

[25] Cf. Giles, *J.R.A.S.*, 1914, pp. 715 sqq.; also his re-translation, *J.R.A.S.*, 1915, p. 45. Our detailed examination above of the archaeological and topographical facts bearing on the true location of the Yü-mên and Yang barriers in Han times makes it unnecessary to discuss here the conclusion which Dr. Giles thought it possible to base upon the *Tun-huang lu* passage reproduced above; cf. above, pp. 623 sq. I doubt whether, in view of the archaeological evidence now available, the late and vague statement in that passage can be used in the way suggested to explain how Li Kuang-li in 103 B.C. reached Tun-huang, while the Jade Gate stood at Nan-hu, etc.

[25a] See above, pp. 622 sq.

[26] See Giles, *J.R.A.S.*, 1915, p. 47, for the rectified translation.

[27] Cf. above, pp. 660, 668.

and also with the regulation length, 7 feet, of the fascines used in its construction.[28] The statement of width on the top does not lend itself to such an exact test, as it necessarily varies now with the different state of preservation in the surviving sections of the wall. Judging from the height indicated, only 8 Chinese feet or 6 British, the wall, where that old Chinese antiquary measured it, must have been already badly decayed, and taking into account the extent of abrasion through the action of the wind which I have often observed, the measurement of only 4 Chinese feet may have been perfectly correct as far as the actual width went. Originally, I have reason to believe, it could nowhere have been much less than 6½ feet as measured by me east of T. xxxv, while the height was found, even in the present ruined state of the wall, to rise in places to above 10 feet.

Distances along Limes noted by *Sha chou chih.*

Turning to the measurements of distance which the *Sha chou chih* records for the ancient wall, it is easy to account for the 180 li given as its extent eastwards. Reckoned from a point on the line of the Limes where it runs due north of the site of old Sha-chou, this takes us approximately to beyond T. xxxv (Map No. 81. B. 3), where in 1907 I traced the easternmost remains of the wall towards An-hsi. When resuming my exploration of the Limes in 1914 from this point, I found the wall to the east almost completely effaced for a considerable distance, evidently owing to the prevalence of abrading drift-sand in this area. The distance from a point due north of Sha-chou to beyond T. xxxv, where, as I believe, the '*Chieh-t'ing* Signal-station' may be placed, is approximately 35 miles in a straight line, which agrees very closely with the 180 li mentioned in the text. From the same point the distance of 212 li measured in the opposite direction to the west, if converted into miles at the same approximate value of 5 li to 1 mile,[28a] would bring us near the lake which is overlooked by the conspicuous watch-post T. xx and into which the Su-lo Ho expands after leaving the Khara-nōr (Map No. 78. A. 3). The configuration of this lake and of the wide lagoons adjoining it north of T. XVIII might well account for the designation of the *Ch'ü-tsê*, or 'Winding Lake', signal-station mentioned by the text. The reference to the wall 'running out into the desert due west in the direction of the territory of Shih-ch'êng' shows plainly that the local informant was aware of the westernmost extension of the Limes and of the route to Charkhlik which passes along and beyond it. We have seen above that *Shih-ch'êng*, or the 'Stone town', was the name given in T'ang times to the site within the present Charkhlik oasis.[29]

Latest Chinese records of Tun-huang Limes.

With this late but strikingly accurate local notice we have reached the latest of the Chinese records concerning the Tun-huang Limes and the Jade Gate which I am able to trace at present.[30] In late mediaeval times, when China followed once again a policy of strict seclusion towards Central Asia and the West, a 'barrier' maintained much further east took the place of the Jade Gate. But the discussion of it belongs to a subsequent chapter.[31]

[28] To these 7 feet must be added the average thickness, apparently 4–5 inches, of the revetment fascines longitudinally fixed on either side of the alternate layers of fascines and stamped clay; cf. above, pp. 568, 570, 606, 678; below, p. 736.

[28a] For other evidence supporting this value of about one-fifth of a mile for the *li* in Central Asia, see, e.g., above, pp. 559, 649, 716; below, chap. XXVIII. sec. i, etc.

[29] See above, pp. 306, 320.

[30] Here I may conveniently note the curious fact that in the Chinese map engraved on stone in A.D. 1137, but probably drawn about a century earlier, which M. Chavannes has edited (*B.É.F.E.O.*, 1903, pp. 214 sqq., carte A), the ancient Wall of Han Wu-ti is still indicated in an approximately correct position. Its western end is marked with the name *Yü-mên kuan*, some distance to the west of *Kua*[-chou], i.e. An-hsi. Beyond An-hsi the wall is shown as running to the north-east, crossing a great lake or marsh and ending near another which receives a river coming from the south-west. I suspect that by the latter is meant the Su-chou R. branch of the Etsin-gol, to which I traced the Limes in 1914. I regret that I am unable to follow up this interesting cartographical record further at present.

[31] See below, chap. XXVII. sec. ii, on the 'Gate' of *Chia-yü kuan.*

SECTION III.—MAIN FEATURES OF THE REMAINS OF THE LIMES

Before reviewing the data which the Chinese documents published by M. Chavannes furnish as regards the organization and daily routine of the Tun-huang Limes, it will be convenient to note, as it were in a bird's-eye view, the main characteristic features of the extant remains of the Limes of which, as the result of my explorations, I have given a detailed description in the preceding chapters. We have seen a continuous line, capable of being watched and protected, coming from the east and stretching away for about a hundred miles westwards into the gravel desert until it strikes a natural flanking defence in the terminal marsh basin of the Su-lo Ho. Throughout, the line of the Limes keeps close to the course of the Su-lo Ho with the obvious purpose of utilizing the river as an advanced 'wet border' northward, just as the Romans did on many a Limes line of their empire, e. g. on the Danube.[1]

Su-lo Ho used as 'wet border'.

Wall replaced by marshes.

The Chinese Limes of Tun-huang, in keeping with its character as a portion of the 'Great Wall', shows a line of wall uniform and absolutely continuous, except in places where the general direction permitted its designers to substitute impassable marshes or lakes, and thus to economize in constructive effort as well as in the maintenance of watch-posts. The saving effected was doubly important on desert ground bare of all resources.[2] Exact parallels to this, too, can be found on the Limes lines of the Romans, e. g. where they took their chain of frontier posts across the string of 'Shott', or salt marshes, south of Tunis or across the Kara-su lakes of the Dobrucha.[3] Everywhere we can also trace the care taken to turn to full advantage whatever facilities the configuration of the ground offered for securing a good outlook or easily defended positions.[4]

Construction of Limes wall.

The same intelligent adaptation to physical conditions is observed in the method of constructing the wall, or *agger*. We have seen that along the whole length of the Tun-huang Limes it is partly built of fascines; placed crosswise in regular layers, which alternated with others of stamped clay and gravel, they assured protection to the wall against corrosion by wind-driven sand, that most powerful agent of destruction throughout this desert region.[5] As material for the fascines, use was made either of reeds or of branches of tamarisks and wild poplars, whichever could be secured nearer.[6] The regular length of these fascines was about 7 feet, and this, together with the longitudinally fixed fascine revetment, determined the thickness of the wall, which along the whole length of the Limes here discussed originally measured from $7\frac{1}{2}$ to 8 feet. The fact that the water needed for reducing the layers of stamped clay to cement-like consistency had, along a great portion of the wall, to be brought over considerable distances makes the exploit of its rapid construction all the more remarkable.

Chain of watch-towers along Limes.

Behind the wall, and nowhere far from it, rose the long chain of watch-towers intended for those who had to keep immediate guard over the line of the Limes and transmit signals and communications along it. At almost all the towers remains could be traced of quarters for the small detachments which garrisoned these posts and furnished watchmen and patrols. The distances between the watch-towers varied considerably according to the character and importance of the ground which had to be guarded, the extent of the view which the position occupied by the tower commanded, and similar local considerations which the detailed descriptions given above of the various sections of the Limes and a study of the map will help to explain. Here it will suffice to

[1] Cf. Kornemann, *Die neueste Limesforschung*, *Klio*, vii. pp. 79, 81.

[2] Cf. above, pp. 662 sqq., 718.

[3] Cf. Cagnat, *L'armée romaine d'Afrique* (2nd ed.), pp. 569, 606, 681; Kornemann, *Klio*, vii. p. 93.

[4] See above, pp. 600, 634, 641 sq., 662, 681, etc.

[5] Cf. above, pp. 568, 570, 606, etc.

[6] Cf. above, e. g. pp. 568, 592, 718.

mention that, whereas on the section explored to the north-east of Tun-huang there were watch-towers (T. xxxii–xxxv) to be found within three-quarters of a mile of each other, the distances on the terminal western stretch of the Limes were generally greater, and in one case as much as 4½ miles in length.[7] On the south-western flank of the Limes, which was well protected by the great natural defence of extensive marshes, and therefore left without a line of wall, we find, on the average, intervals of about 5 miles between the watch-stations.[8] The high commanding positions on which they were placed here made it easy to secure visibility for signals. It is for the same reason that also along the proper Limes wall we find high isolated clay ridges, or Mesas, invariably selected, where available, as the positions for watch-towers.[9] In a number of instances where conditions were particularly favourable the building of a proper tower could thus be saved, a mere guard-room on the top of a high Mesa base equally serving its purpose.[10]

Constructive features of watch-towers.

The watch-towers were always built solid and square, tapering towards the top; but they varied considerably in size, height, and materials used for construction. We find bases from 16 to 24 feet square.[11] Owing to the broken condition of the top it is often impossible to determine the original height. But by the side of towers still reaching 30 feet or so in their actual state (T. v, vi. d) we have others where the original elevation, as marked by the floor of the guard-room, was not more than 8–13 feet.[12] No doubt, the height adopted for individual towers was largely determined by the elevation of the place they occupied and by the range of vision which was aimed at for watching or signalling. The choice of the materials used in construction similarly depended on local circumstances. In most cases where bricks, always sun-dried, were employed, we find that water was not available on the spot; over distances or to heights the transport of bricks was, no doubt, easier than that of water in quantities such as would have been needed for the puddling of stamped clay.[13] The size of the bricks shows little variation, a circumstance pointing to approximately contemporary construction of the towers.[14] The use of stamped clay, usually in layers 3 to 4 inches thick, may safely be taken as an indication that water was at the time of construction obtainable at no great distance.[15] The same observation, with a modification, applies also to another local material, clods of hard salt-impregnated clay, of which T. x (Fig. 174) furnishes a striking example.[16] Soil producing such clods would ordinarily hold only brackish, undrinkable water. Whatever the building material used was, we find it always strengthened by the insertion of those layers of reeds, usually after three courses of bricks, stamped clay, or clods, which I have come to look for in this region in all structures of Chinese origin belonging to Han times or those immediately following. In addition, the masonry was reinforced by the insertion within the towers

Bricks used in masonry.

Reed layers between masonry.

[7] See T. xxii. c–d in map Pl. 33. In this case the two watch-towers thus separated occupied opposite shores of a southern bay of Lake Khara-nōr. Thus the intervening distance was defended by nature, and guarding and visibility for signals easily assured. Where the foreground was *coupé* and for other reasons also needed a specially careful watching, as between T. xvii–xvii. a, or T. xix–xx, we find the interval reduced to one mile only.

[8] See above, p. 641.

[9] Cf. above, p. 634 (T. iv. a, b), pp. 572, 662 (T. ix, x), p. 666 (T. xi), p. 697 (T. xiv. a), p. 711 (T. xv), p. 712 (T. xvii. a), pp. 717 sq. (T. xix, xx), pp. 718 sq. (T. xxi–xxii. a–c), p. 720 (T. xxiii).

[10] See above, pp. 712, 717 sq. (T. xvii. a, xix, xxi).

[11] E.g. in T. i, xxiii, xxxiv, the bases are 16′ square; T. viii, xi, xii. a, xiii, xvi have bases 23–24′ square.

[12] See pp. 711, 721 (T. xvi, xxiii. a).

[13] This consideration probably accounts for the use of bricks at T. iv. b, vi. a–c, viii, ix, ix. a, xiii, xiv. a, xv–xvii, xix–xxi, xxii. b, xxiii. a, xxvii. At T. xii, xii. a, xv. a, where also bricks were used, water was, however, not far off.

[14] The prevalent size is 14–15 by 7–8 inches, with a thickness of 4–5 inches; see T. iv. b, vi. a–c, viii, xii, xiv. a, xv. a, xv–xvii, xxiii. a. A slightly bigger size, 17–18″ by 8–9″, with a thickness of 4½–5″, is found at T. ix. a, xii. a, xxi, xxvii. It may be noted that the size of bricks, 12 by 6–7 inches, found in the ruined shrine near T. xxix (see above, p. 601) is a further proof of its late date.

[15] Stamped clay is found used, e.g., at T. i, ii, v, vi. d, xviii, xxii. c, xxvi, xxviii–xxxiv.

[16] Hard lumps of salt-impregnated clay are employed in T. iv. c, x, xi, xxii, xxiii.

of a framework of solid Toghrak timber, as seen in Figs. 150, 169. No wonder that, built with constructive methods so excellently adapted to the peculiar physical conditions of these desert marches, the ruined watch-towers of the Limes could brave wind-erosion and other destructive forces for over two thousand years.

Guard-rooms on top of towers.

I have already referred to the small guard-rooms still found on the tops of certain towers,[17] and it appears *a priori* certain that some shelter of this kind, or at least a protective parapet, must have been provided on all for the men on guard, even though the broken condition or present inaccessibility of the top did not allow me to verify this directly. That access to the tops of the towers was necessary for observation and signalling is obvious. But there is also direct evidence of it in the remains of stairs still found at certain towers and in the foot-holds provided on others. There the men on watch were expected to clamber up to the top by means of a rope, a method I still saw in use nowadays at modern watch-towers of Tun-huang, Su-chou, and neighbouring tracts of Kan-su.[18] Such foot-holds must have specially recommended themselves on occasions when the tops of the towers had to serve as places of safety from attack for the small detachments there stationed. In fact, even where stairs were provided it is very probable that they led up only as far as the roof of the quarters, whence the remaining height of the tower would have to be climbed by rope and foot-holds.

Defensive character of watch-towers.

In any case, such defensive purpose is directly attested by the frequent instances where big stones were found either still on the top, as originally stored as missiles, or else lying at the foot of towers after the top had crumbled away in ruin.[19] Arrangements for this primitive but, under quasi-archaic conditions, very helpful method of defence could be observed everywhere on the walls of the fortified villages (*p'ao-tzŭ*) and farms with which the cultivated areas of Tun-huang, Su-chou, and other outlying tracts of Kan-su are studded. Even on the walls of Ch'ien-lung's imposing 'gate' castle of Chia-yü kuan I found this quaint ancient armament stored.[20] Any defensive value that the watch-towers may have claimed was limited to their use as places of refuge by the few men there stationed in the event of sudden irruption. That they could not have been intended for the active defence of the wall is also proved *inter alia* by the greatly varying distance between them and the wall. Where the distance was small, as at T. XXIX, XXXII (19 and 26 feet respectively), the wall was made to curve round like a little bastion. Elsewhere, as at T. VIII and XI, we find the wall passing the tower at distances of 24 yards and more.

Remains of quarters at watch-towers.

That the towers were regularly kept plastered and painted is proved by the successive layers of whitewash found on parts of their faces where they had been protected by the walls of quarters subsequently built on.[21] The object, no doubt, was mainly to make the towers more visible from a distance at night or in the dust haze of windy days. Whether the quarters, of which remains could actually be traced below most of the towers, were always later additions could not be determined owing to the poor preservation of many of these ruins. But an examination of the plans showing the structural arrangement of the quarters, wherever it was still traceable with some degree of accuracy, suffices to show how extremely confined the accommodation ordinarily provided was.[22] Even at T. VI. b, an important post, as we have seen, the space available within the extant quarters would scarcely have allowed more than a dozen men to find shelter with a minimum of

[17] Cf. above, p. 737; also pp. 651, 711, 717, 721 concerning T. VI. c, XVI, XIX, XXI, XXIII. a.

[18] Stairs were preserved under the ruins of adjoining quarters, e.g. at T. IV. b, VI. b, VIII, IX. a, XIII. Foot-holds could be clearly traced on towers like T. VI. c, d, VII.

[19] Cf. above, pp. 639 sq.

[20] See *Desert Cathay*, ii. p. 277.

[21] See above, pp. 645, 658, 681, as regards T. VI. b, VIII, XIII. For the layers of whitewash found on the walls of posts on the Roman Limes in Africa, cf. Cagnat, *L'armée romaine d'Afrique*, p. 601.

[22] Cf. Plans Pl. 34, 36–39 for the quarters of T. III, IV. b, V, VI. b, c, VIII, XII, XII. a, XIII, XIV. a, XVI, XIX, XXVII.

comfort. This point deserves to be specially noted with regard to questions raised by the documents about the organization of the detachments which in ordinary times were actually stationed on the Limes Wall. The plans sufficiently illustrate the disposition of the small rooms to which apparently, for reasons of safety, access was gained only by a single narrow entrance.[23] The walls were mostly built of bricks of the same size as generally found in the masonry of the towers, and they, too, were amply covered with whitewash.

Ancient Limes magazine, T. xviii.

It only remains for us to pass in rapid review the few ruins, distinct from the wall and watch-towers and yet connected with the Limes, which I was able to trace, and of which the true character has been revealed by my explorations. As they have in each case been fully discussed, the briefest reference will suffice here. Starting from the east, we have first the ancient magazine, which is represented by the imposing ruin of T. xviii, situated in a carefully selected position on what is still the route towards Lop. We have documentary proof that it goes back to the first century B.C., and we are justified in assuming that it was probably built at the same time as the westernmost extension of the Limes and the first organization of the military and trade route to Lou-lan. Of the traffic which then passed along it, the great size and solidity of the structure affords striking evidence. Next we come to the site of *Yü-mên*, or the Jade Gate, marked by the small but massive fort and the adjoining débris-covered mound of T. xiv. This site, too, is on the direct route to Lop, and its position was carefully chosen to meet the needs of a headquarters station and *point d'appui* for the 'barrier' (*kuan*) which formed the terminal and most exposed section of the Limes.[24] The detailed discussion in the preceding sections of the historical notices referring to the Jade Gate makes it unnecessary to emphasize the importance and interest of this site. Badly decayed as the remains on the mound adjoining the ancient fort are, the extent of refuse-heaps there found and the contents of the documents which they yielded clearly show that the site must have been occupied during Han times by an agglomeration of quarters, numerous if probably not very substantial. The last remark applies also to the site of T. xv. a, due north of the Jade Gate and only a short distance behind the Limes wall. I have, I believe, proved above that it was occupied by a subsidiary 'gate' station of Yü-mên controlling the 'New Route of the North' opened about A.D. 2.[25]

Site of the *Yü-mên* head-quarters.

Terminal western corner of Limes.

We next pass the small watch-station of T. xii, placed at a point where the configuration of the ground made it particularly easy to exercise additional police control over the traffic on the Lou-lan route.[26] Then, after sighting from afar the outpost of T. ix. a, thrown out well beyond the wall for the sake of a better command of the foreground, which was here unprotected by marshes,[27] we arrive at the terminal western corner of the Limes, T. iv. I have fully explained above the indications which lead me to assume that there once stood here an entrenched camp or caravan halting-place capable of defence.[28] Unfortunately, the physical conditions at this locality have deprived us of documentary evidence to verify the character of the scanty remains. Finally, following the line of the watch-towers échelonned along the south-west flank of the Limes, we come to the site of T. vi. b, where an abundant harvest of documents going back to the first half of the first century B.C. has allowed us to recognize a small station forming the sectional headquarters for the outposts that guarded the extreme flank of the Limes.[29]

South-west flank of Limes.

One more remark in conclusion. There probably never existed on our globe a systematically organized and guarded border-line stretching over desert ground which was as barren and forbidding

[23] Cf. T. vi. b, c, T. viii, xxvii in Plans Pl. 34, 37, 38.
[24] See above, pp. 683 sqq.
[25] Cf. above, pp. 705 sqq.
[26] See above, pp. 679 sq.
[27] Cf. above, p. 662.
[28] See above, pp. 636 sqq.
[29] Cf. above, pp. 644 sqq.

Barrenness of ground traversed by Limes.

as that traversed by the Great Wall beyond Tun-huang must have been all through historical times. This geographical fact once properly recognized forces upon us two conclusions which have their special antiquarian bearing. In the first place, we must realize that on such ground the constant maintenance of considerable detachments or bodies of troops, along a line which for great stretches was devoid even of water, would have presented most serious difficulties about supplies and transport. This makes it obvious that the regular pickets stationed at the watch-towers along the Limes wall in ordinary times must have been small, probably limited to the minimum compatible with the maintenance of an efficient signal and patrol service and with the protection of the line from such incursions as a few raiders might attempt at a time. The larger bodies, which would have been needed to repel any possible inroad in force across the deser north and west, could be kept available only within, or quite close to, the habitable areas of the Nan-hu and Tun-huang oases. In the second place, it appears to me very improbable that on such ground, for the most part absolutely bare gravel desert and almost everywhere so open that even mere débris heaps of completely decayed towers, less than a dozen feet high, could be sighted with ease miles away, structural remains of any consequence, other than those actually explored, could have escaped the notice of myself and my assistants, while we repeatedly crossed and recrossed the area within the westernmost Limes for months. We shall see further on how this observation warrants us in drawing certain inferences from purely negative evidence and in using them for the interpretation of statements contained in our documents from the Limes.

Pickets limited by difficulties of supply.

Section IV.—MILITARY AGRICULTURAL COLONIES

In our review of the antiquarian information to be found in the documents from the Limes it will be convenient to start with those records which can throw some light on the general organization of the Tun-huang border, and subsequently to proceed to the far more numerous class furnishing details about those who kept watch there and about the varied aspects of their duties and daily life. Among the former records by far the most important is the complete and neatly written, but in some places effaced, slip T. vi. b. i. 289 (*Doc.*, No. 60, Plate III). It reproduces an 'imperial order given to the governor of [the command of] *Chiu-ch'üan*' and manifestly relating to the establishment of a military colony on the border. The order first mentions 'two thousand from among the garrison soldiers of the command of *Tun-huang*', who apparently together with others 'from the command of *Chiu-ch'üan*' were to be raised for the enterprise. 'The *ssŭ-ma* and his subordinates, together with the generals, soldiers, and [indigenous] functionaries, will proceed to occupy a locality in order to establish there an agricultural colony. It will be the duty of the governor to examine the configuration of the places. By utilizing natural obstacles a rampart will be constructed in order to exercise control far away.' The order closes with a formal injunction often found at the end of other documents from the Limes: 'Let there be no negligence of any kind, and be the orders conformed to.'

Imperial order to governor of *Chiu-ch'üan.*

If we carefully consider the context of the edict reproduced in the document and the place where the latter was found, it appears to me difficult to doubt that the agricultural colony of soldiers to be established must have been connected with the extension of the Limes beyond Tun-huang. General as the terms of the edict are, it yet refers clearly to the construction of a defensive line which was to guard the outlying ground to a distance; it was to be built with due regard to the 'configuration of the ground' and with whatever advantages could be derived from the use of natural obstacles. After our detailed survey of the westernmost portion of the Limes it is needless to emphasize how closely the directions here given are reflected by its actual features. The

Edict refers to extension of Limes beyond Tun-huang.

mention of the 'command of Tun-huang' proves that the edict must be later than 111 B.C., while the reference made to the 'command of Chiu-ch'üan', i.e. Su-chou, suggests that it dates from a time when the latter still retained its original character as the true advanced base for Chinese expansion into Central Asia.[1] Considering that the documents found at T. vi. b go back as far as 68 B.C.,[2] there is no chronological difficulty about assuming that the imperial edict quoted in our document belongs to the years *after* 102–101 B.C., when, as we have seen above, the westernmost extension of the Limes beyond Tun-huang took place.[3] I have shown also that this extension is likely to have been planned from the first to reach the natural line of defence on the south-west, including the station of T. vi. b where the record was found.

Location of agricultural colony.

The question how a document that reproduces the imperial edict connected with that extension actually found its way to this station obviously need not trouble us. The big refuse-heap of T. vi. b. i had undoubtedly received the contents of an old office archive. The only problem is how to explain that part of the edict which relates to the foundation of a military agricultural colony, or rather where to locate it. That the establishment of such colonies in the protected belt along the great highway westwards was an integral part of the Emperor Wu-ti's 'forward policy', from the time when it first pushed the continuation of the 'Great Wall' beyond the Yellow River, is clearly proved by the Chinese historical notices discussed at the beginning of this chapter.[4] Without Chinese colonies organized on a military basis it would have been impossible to assure either the maintenance of the troops needed for guarding the Limes or the provisions needed for the trade caravans, expeditions, and political missions, the secure movement of which it was the main object of that policy to render possible; for any scanty settled population that the cultivable tracts along the foot of the Nan-shan may have contained while held by the Hsiung-nu and their equally nomadic predecessors, the Yüeh-chih, was removed on the Chinese conquest, as the Former Han Annals distinctly record.[5] Yet I feel equally certain on geographical grounds and from the actual survey of the ground that such an agricultural colony could not have been placed anywhere along the actual line of the wall beyond the Khara-nōr, and still less by the edge of the terminal marsh basin of the Su-lo Ho where the watch-station T. vi. b stood.

Cultivation impossible along Limes west of Tun-huang.

The full account I have given above of the physical features of the desert area traversed by the Limes west of Tun-huang[6] makes it unnecessary to support this statement by detailed explanations of a topographical nature. Cultivation was never possible within historical times either in the marshy depressions which skirt the terminal course of the Su-lo Ho or on the gravel plateaus which overlook and divide them. The plateaus could never have been irrigated from the Su-lo Ho owing to their elevation and the general configuration of the ground. Nor could there have been, during historical times, a sufficient permanent supply of water at the foot of the hills west of Nan-hu to cross the huge gravel glacis, partly covered with high dunes, and assure irrigation south or south-west of the Limes. That agriculture without irrigation would have been as impossible here in ancient times as it is nowadays scarcely needs emphasizing. Nothing could demonstrate better the exceptionally arid climate of this region since early times than the bare fact that wooden documents thrown out on a refuse-heap in the first century B.C. had survived, often in an almost perfect state, until I came to recover them from under a few inches of gravel or rubbish. These observations are supported by the fact that nowhere along the Limes west of Tun-huang were even the slightest indications of permanent ancient occupation traceable, apart from the remains of the watch-towers and stations described.

[1] Cf. above, p. 724; Chavannes, *Documents*, p. v, note 5.
[2] Cf. above, p. 647; *Doc.* No. 255.
[3] See above, p. 728.
[4] Cf. above, pp. 724 sqq.
[5] Cf. Wylie, *J. Anthrop. Inst.*, x. p. 22; above, p. 728.
[6] Cf. above, chap. XVII–XIX, *passim*.

Agricultural colony placed at Tun-huang or Nan-hu.

We are thus forcibly led to conclude, as the only acceptable explanation of that record, that the new agricultural colony prescribed by the imperial edict must have either been created by an extension of the cultivated area of the main Tun-huang oasis or else established at what is now the small oasis of Nan-hu. It is at least certain that only in these two areas could fresh land be brought under cultivation yielding the produce needed by the two thousand odd military settlers who were to guard the newly advanced Limes. We have no means of definitely deciding at which of the two oases the new 'agricultural colony' was actually settled. But the close connexion which historical texts attest between the Yang barrier placed at Nan-hu and that of the Jade Gate, as well as the fact that Nan-hu was certainly a much nearer base of supply for the Jade Gate and the westernmost section of the Limes than Tun-huang, points to the probability of the former locality being intended. We have seen that the water-supply available for the Nan-hu oasis is likely to have been once considerably greater than it now is.[7] In any case there is the significant fact that the distance from the ancient granary of the Limes, T. XVIII,[8] to the northernmost point of Nan-hu cultivation, as it existed in recent times, is only about half of that to the nearest point of the Tun-huang oasis.

Soldier colonies at some distance from wall.

The main conclusion which results from our examination of the imperial decree is important in several ways. The fact that the defence of the Limes beyond Tun-huang was provided for by a colony of soldier cultivators settled on land at some distance from the line of the wall helps, as we shall see further on, to explain certain statements in the documents which we might otherwise have found difficult to reconcile with the archaeological indications furnished by the actual remains of the Limes. It makes it in particular much easier for us to understand how it was possible to maintain a permanent organization during more than two centuries for the watching and, whenever needed, the active defence of a border line which was extended for so considerable a distance through absolute desert bare of all resources. The small pickets which in ordinary times kept watch and guard at the towers on the Limes, and which alone the much-confined quarters actually traceable could possibly have accommodated, would in times of danger be strengthened and supported by the larger bodies of military colonists from which they had been detached, as it were, on outpost duty.

Limitations of produce in Su-lo Ho basin.

The evidence concerning details of the organization here assumed that is obtainable from other records of the Limes will best be discussed later on. Here it will suffice if I draw attention to two important facts which at the outset hold out strong support for the general view just set forth. In the first place, we must keep in mind what has been explained in a previous chapter about the physical conditions of the Su-lo Ho basin and the strict limitation of its resources,[9] and remember that the same applies also in the main to the narrow belt of cultivable tracts eastwards along the foot of the Nan-shan. The difficulties thus caused for the maintenance of troops must have made themselves felt quite as much in ancient as they certainly have in modern times.[10] No system could have been better adapted to overcome them than one combining the provision of a permanent local force for the Limes with the production of the food supplies which it needed. It is obvious that such a system was workable only on a basis which would allow the bulk of the soldier colonists to remain near their lands except in times of emergency, while the actual guard and signal service along the desert Limes were carried on by small detachments in turn. This convenient distribution of the

[7] Cf. above, pp. 614 sq., 627 sq.

[8] See above, pp. 714 sq.

[9] Cf. above, pp. 579 sqq.

[10] When Tso Tsung-t'ang's and Liu Chin-tang's forces after 1873 slowly made their way through Western Kan-su for the reconquest of the 'New Dominion', the chief obstacle to their advance was the want of sufficient supplies from the oases along the great route skirting the north foot of the Nan-shan, where the Tungan inroads had greatly reduced or practically exterminated the population. The story, often repeated, that the reconquering Chinese army had to halt for a year at each of the chief stages in order to sow and reap the corn which it needed for its further advance specifically applies to its progress along what once was the north-west extension of the 'Great Wall'.

border troops between detachments garrisoning the watch-towers and much larger reserves kept available in the nearest permanently inhabited area was not likely to be abandoned even after a change may have taken place in the composition of the border force at some subsequent period.

Analogy of military colonies on Roman *limites*.

But support quite as convincing is furnished by the analogy of the arrangements prevailing on the *limites* of the West, both in classical and modern times. It is unnecessary to point out here at length how great a part was played in the Limes policy of the Roman Empire by the military colonies which were established in the newly-conquered border territories, either to protect the great strategic routes, the true *limites* of the periods of expansion, or to provide for the defence of the lines of posts safeguarding the occupied areas from barbarian raids and the like. While the regular Legions, representing the offensive forces of the Empire and kept as general reserves, were concentrated in big cantonments, often far behind the actual border lines, their protection was entrusted to bodies of auxiliary troops from the border territories themselves. Without being permanently embodied this militia held fortified camps capable of effective defence in case of serious inroads. From these again small detachments were pushed out to garrison the towers which guarded the exterior Limes, and to patrol any continuous rampart, ditch, palisade, or other barrier that might have been drawn to link up the towers and to demarcate the actual frontier.[11]

Parallel of Austrian military border on Danube, etc.

A very instructive parallel is to be found also in the organization of an extensive and historically interesting Limes system of modern Europe which survived almost down to our own times. I mean the military border territory, or 'Militär-Grenze', which was created by the Austrian Central Government at the beginning of the eighteenth century after the complete expulsion of the Turkish power from Hungary.[12] This territory was constituted from those districts of Hungary proper, Transylvania, and Croatia which adjoined the north bank of the Danube and Save, then forming the frontier towards the Turkish empire. The purpose aimed at was to provide a Limes which would render the newly reconquered borders safe from marauding inroads of Turkish irregulars and the like. Only thus was it possible to assure the peaceful development of vast tracts further north which, owing to the Turkish wars of more than a century and a half and the constant border troubles filling the intervals, had become almost waste. There was, no doubt, also a definite intention from the first to create in this modern Limes a convenient military base for further expansion south of the Save and Danube, such as was actually pursued during the first third of the eighteenth century. But subsequently, as Turkish power weakened, the function of the 'Grenze' became more and more confined to that of a police and quarantine border, and thus corresponded very closely to the 'barrier' or *kuan* character of the Chinese 'Great Wall'. Even this function had practically ceased before the final restitution of the territory occupied by the 'Grenz' regiments to the civil administrations of Hungary and Croatia took place in 1872.

[11] The works in which the military system maintained for the protection of the different border provinces of the Roman Empire are discussed in their general features are not accessible to me now. But a reference to Prof. Kornemann's comprehensive historical synopsis of the Roman Limes systems, *Klio*, vii. pp. 77, 85 and *passim*, will show that the dispositions sketched above in bare outlines prevailed during the periods when the Empire pursued a powerful policy on its frontiers.

I particularly regret my inability to refer to Prof. v. Domaszewski's important paper on the *Beneficiarii* there repeatedly quoted (*Klio*, vii. pp. 73, 77 etc.), as their settlements seem to correspond closely in character and functions to the early military colonies on the westernmost Chinese Limes. Cf. also the references made to the *coloniae veteranorum* on the Roman borders, *ibid.*, p. 87, and the *consistentes* along the Danube Limes, p. 100.

[12] The above brief sketch of the 'Grenze' system on the Danube and Save is based on the general knowledge that I possess of its history and of the conditions under which it was maintained down to the days of my early youth. No literature is at present accessible to me on the subject. In the interest of historical research it is much to be hoped that the organization of this very complete Limes system of modern Europe may have been thoroughly studied and recorded by a competent historian while the documents and local knowledge concerning it were still fully available.

Organization of military border on Danube.

What makes the comparison with this modern Limes on the Danube of direct interest to us here are certain essential facts about the origin of its settlements and its military organization. As the tracts comprised in the 'Grenze' had become very largely deserted during the long preceding period of Turkish aggression and misrule, population had to be provided for them by the settlement of military colonists. These were drawn partly from other countries in the Habsburg dominions and partly from Serbian refugees that had crossed the Danube. The settlers were from the first brought under a purely military administration of which the company was the local unit. The cultivators belonging to a company formed a village community that held its lands in common. To each company was allowed a certain number of the watch-posts, usually placed in palisaded enclosures or towers (*palanka*), which guarded the line of the border. The small detachments needed for this purpose were provided by the family groups within each company giving their quota of men in turn. In addition to this periodical guard-mounting at the border posts, the military colonists were liable to a *levée en masse* in case of war. The regiments into which the border troops were already organized in peace time for the purpose of such general service could be employed far away from their frontier, and have often played their part on the battle-grounds of Italy, the Low Countries, or Germany. Special concessions as to land-tenure, etc., were meant to compensate for the hardships of such liability to service, which was practically lifelong. The officers who commanded the smaller units and looked after their administrative affairs in peace time were largely drawn from the border population itself; but appointments, especially in the higher ranks, were open also to officers of the regular army.

Limitations of documentary information.

It is on general lines such as these, but, needless to say, with all the modifications implied by the differences of period, ground, civilization, etc., that we may with some probability assume the military 'agricultural colonies' established on the westernmost Chinese Limes to have been originally organized.[13] It is impossible to expect that, with such scattered and often incomplete materials as our documents from the watch-posts of the Tun-huang Limes are, we should be able with certainty to reconstitute all essential details. Still less can we hope to trace such changes as are likely, in the course of more than two centuries, to have come over the arrangements for guarding the line of the Limes. These cannot have remained unaffected by the greatly varying phases through which, as we have seen, China's policy towards Central Asia and the distant West passed during the long period (98 B.C.–A.D. 137) covered by our documents. In this respect, too, the details must, in the absence of a connected historical record, necessarily escape us. Yet, in spite of these limitations, we obtain from the documents many interesting glimpses of the organization once maintained on this desert border, and the general observations just set forth may help us to interpret them better.

Other records of imperial orders.

Before proceeding to details of that organization it may conveniently be noted that the document No. 60, which reproduces an imperial edict directing the establishment of a military colony, is not the only record to prove the issue of imperial orders concerning this distant border. In No. 63, from the same watch-station T. VI. b, we have the record, not completely decipherable, of an imperial edict concerning the constitution of the Ling-hu, Yen-hu, and Kuang-ch'ang companies, all three of which can be proved to have garrisoned watch-posts on the extreme south-west flank of the Limes.[14] Unfortunately, the details about the sections and the strength prescribed cannot be made out with certainty. The other documents which mention imperial edicts, and which also, curiously enough,

[13] See above, pp. 725, 729. As a curious modern parallel may be mentioned the organization of the Tun-huang levies raised from local agricultural families which I found in force on my visit to the oasis in 1907; see *Desert Cathay*, ii. pp. 17, 294. No doubt similar—and equally ineffective—arrangements could still be traced elsewhere on the borders of modern China.

[14] See above, p. 648.

were almost all found at T. vi. b, enlighten us even less about the subjects dealt with.[15] One of them, No. 206, however, is of interest because it conveys a response direct from the Emperor to some report submitted probably by the Tun-huang authorities. 'The imperial decree is: "Approved.'" The formula is the traditional one of the imperial *chancellerie* in Han times. But, considering that the writing material used is a common slip of tamarisk wood, it seems to me far more likely to be a copy made at Tun-huang than an original document from the capital.

Section V.—OFFICERS AND SOLDIERS OF THE LIMES

Higher authorities of Limes.

In our synopsis of the documents illustrating the organization and routine of the Tun-huang Limes it will be convenient to start from those in which we find references to the higher administrative divisions and authorities; for in their case we can utilize also the data that M. Chavannes has rendered accessible from historical records of the Han period. The mention which No. 450 from the site of T. xv. a makes of a high dignitary, apparently controlling at the time of Wang Mang the four commands from Tun-huang to Liang-chou, is too fragmentary to permit of any closer determination of his position in the official hierarchy. The same applies to the order addressed in No. 424 'to those who administer the command of Chiu-ch'üan (Su-chou)'. But there can be no doubt that the 'governor', *t'ai-shou* 太守, of the Tun-huang command whom several documents mention was the chief local authority charged with the administration of the westernmost portion of the Limes.[1] Next to the governor ranked apparently his assistants, whom several documents refer to under the title of *chang-shih* 長史, as attested by the Former Han Annals.[2]

Governor of Tun-huang command.

Commandants of Limes sections.

Within the command of the governor of Tun-huang we find the administration of different sections of the Limes entrusted to 'military commandants', *tu-wei* 都尉, in exact conformity with the organization which the Former Han Annals indicate.[3] That one of these sections, or *pu* 部, was that of the Yü-mên barrier is quite certain from the several documents which mention the 'military commandant, *tu-wei*, of Yü-mên'.[4] Besides him we find references to the '*tu-wei* of Tun-huang'[5] and to the '*tu-wei* of Yi-ho', a section which is elsewhere referred to as the 'Yi-ho barrier'.[6] We have already seen that this Yi-ho section of the Limes, repeatedly mentioned in documents from T. xxvii, must be located to the north-east of the Tun-huang oasis.[7] In *Doc.* No. 136 we have an order issued by a certain officer who was the assistant *ch'êng* 丞 of a *chang-shih* under the Tun-huang governor, notifying his own appointment as 'military commandant' (*tu-wei*)

[15] No. 230, a mere 'shaving' and incomplete, mentions 'the vast Western regions'. No. 205, incompletely preserved, acknowledges the receipt of an imperial edict addressed apparently to a certain functionary, while in Nos. 136, 138–43, 291, 450 the reference is merely in the shape of a fixed formula enjoining 'compliance with the text of the imperial edict'.

[1] Cf. *Doc.* Nos. 136, 201, 497. Nos. 140, 375, 428 may also be safely assumed to refer to the governor of Tun-huang, though they do not specifically name his command.

We have already met with the 'governor of the Chiu-ch'üan (Su-chou) command' in the imperial edict, *Doc.* No. 60, concerning the establishment of an agricultural colony; see above, p. 740.

[2] Cf. *Doc.* Nos. 136, with M. Chavannes' note, 367, 497; also No. 428. It is interesting that in Chin times the title '*chang-shih* of the Western countries' apparently denotes the highest Chinese political representative maintained in the Tārīm Basin; see above, pp. 408 sq., and *Doc.* Nos. 751, 752, 885 from Lou-lan.

In what relation the governor stood to the civil subdivisions of Tun-huang, of which the sub-prefecture of *Lung-lo* is repeatedly mentioned (Nos. 378, 415, 488, 540), I am unable to examine.

[3] Cf. M. Chavannes' full explanation, *Documents*, p. 131. The sections are designated as *pu* 部 in the Annals.

[4] Cf. *Doc.* Nos. 137, 305, 381, 428, 451, 483.

[5] See *Doc.* No. 341.

[6] Cf. *Doc.* Nos. 61, 567. M. Chavannes in his note on the first document shows that the *Ch'ien Han shu* specifies the *Yi-ho tu-wei* as a military commandant charged particularly with the organization of military colonies and as resident in the fort of K'un-lun, a locality mentioned also in No. 61.

[7] Cf. above, p. 596.

of the section of Hsün-ch'êng 循城. The name is not met with elsewhere and looks curious, as it literally means 'along the [Great] Wall'.[8] In what relation the 'superintendent of Yü-mên barrier' mentioned in some documents of T. XIV stood to the '*tu-wei* of Yü-mên', I am unable to make out.[9]

Military sub-divisions on Limes.

We find yet another *tu-wei* of Tun-huang mentioned in the interesting and fortunately complete document No. 592, T. XII. a. 3, of A.D. 21, which contains the pay account of a certain soldier, and incidentally furnishes us with definite indications as to the successive grades of the military hierarchy on the Limes. Corporal Wang, to whose origin and claim for pay we shall have occasion to refer further on,[10] is described as 'subordinate to the officer commanding a watch-post of the *P'ing-wang* barrier, which depends on *Pu-kuang*, sub-section (*ch'ü* 曲) and residence of the [*tu*-]*wei*, in [the command of] *Tun-tê*', i.e. Tun-huang.[11] We have already seen that the local name P'ing-wang 平望 was applied to that portion of the Limes which extended from the Jade Gate eastwards to T. XXII. c and perhaps further still.[12] Of *Pu-kuang* 步廣 M. Chavannes shows that it is described in the *Ch'ien Han shu* as a military subdivision (*hou-kuan* 候官) with fortified headquarters in which the *tu-wei* of the central section had his official residence.[13] It seems, therefore, to follow that the section of the Limes comprising P'ing-wang and extending east of the Jade Gate was under the administration of the military commandant, or *tu-wei*, of the 'central section' of Tun-huang.[14] The term *hou-kuan* which has just been mentioned, and the application of which during Han times M. Chavannes has discussed at some length,[15] is also met with in our documents. In the Han Annals the term is applied to administrative subdivisions subject to military authority and having fortified headquarters. The references in the documents are too brief to furnish clear evidence on the point. But it is of interest to find the term coupled with the names of Yü-mên and Ta-chien-tu.[16]

Officers subordinate to *tu-wei*.

The fact that the great mass of our Limes documents has been recovered at small watch-posts explains why references to officers subordinate to the *tu-wei* are far the more numerous. Among such the *Ch'ien Han shu*, as M. Chavannes points out, specially names 'chiefs of a thousand men', *ch'ien jên* 千人, and *ssŭ-ma* 司馬,[17] and, no doubt, they represented the higher ranks in the military hierarchy below the *tu-wei*. The *ssŭ-ma* are met with in about half a dozen documents without their function being made clear to us.[18] The former were evidently graded higher, and may have exercised functions corresponding to those of a battalion commander. It is significant that the three documents in which they are mentioned were found at T. XIV, the Jade Gate headquarters.[19]

[8] The order is addressed to the commander of the *Yen-hu* company, which, as we have seen above, p. 648, probably garrisoned the watch-station T. VI. c, and it was actually found at T. VI. b. Was *Hsün-ch'êng* at any time the designation of the extreme western section of the Limes, or is it possible to assume that what was meant by the 'section along the Wall' was really the Yü-mên barrier section? *Ta-chien-tu* at T. IV was certainly comprised in this according to other documents; see above, pp. 689, 691.

[9] Cf. *Doc.* Nos. 315–17. The specific title is shown by M. Chavannes, *Documents*, p. 231, to be attested also in the commentary of the *Ch'ien Han shu*.

[10] See below, p. 757.

[11] For the name *Tun-tê* 敦德 given to Tun-huang by Wang Mang, cf. Chavannes, *Documents*, p. 130.

[12] Cf. above, pp. 691, 699, 720, and for the companies which furnished pickets for its watch-posts, pp. 717, 719. Though frequently mentioned (see *Documents*, Index), P'ing-wang is not specifically designated as a 'barrier' elsewhere.

[13] Cf. Chavannes, *Documents*, pp. 130 sqq. *Doc.* No. 623, T. XXVIII. 37, mentions *Pu-kuang* as a place where a halt was made for the night.

[14] M. Chavannes is doubtful about a possible reference to yet another section commanded by a *tu-wei* which may be contained in *Doc.* No. 168, T. VI. b. i. 142.

[15] Cf. *Documents*, pp. 130 sq.

[16] Cf. *Doc.* Nos. 166, 458. In the latter record, referring to Yü-mên, M. Chavannes translates *hou-kuan* by 'forteresse'. The term is found also in *Doc.* Nos. 165, 261, 302, 542. No. 302, about which see p. 748 below, distinctly points to a *hou-kuan* comprising a cultivated area.

About the position and character of Ta-chien-tu, cf. above, pp. 636, 691.

[17] Cf. *Documents*, p. 72 in note on *Doc.* No. 305.

[18] See *Doc.* Nos. 55, 60, 275, 438, 461, 605.

[19] In *Doc.* No. 305 a certain *ch'ien-jên*, having the title of

Doc. No. 451 emanates from a 'deputy' to the *tu-wei* of Yü-mên, and another, No. 381, names in general 'officers dependent' on the latter. But the officers most frequently mentioned are the company commanders, or *tui-chang* 隊長.[20] An examination of the documents which name them, almost always with the designation of the company commanded, shows beyond all doubt that they were directly charged with the internal administration of the company units into which the troops at each Tu-wei's disposal were divided. We have receipts given to them for food-supplies that they had issued to soldiers and others,[21] and for clothing which they had furnished to individual soldiers.[22] Certain company commanders are spoken of as detailed for the supervision of granaries in the territory of the Tun-huang command.[23] We find them twice referred to in conjunction with 'indigenous functionaries', about whom more anon.[24] But only one out of over two dozen records refers to an order issued by one of them to an officer in charge of a watch-post; [25] and documents showing them as directly concerned in military measures, reports, or the like are significantly absent.

Company commanders (*tui-chang*).

The companies (*tui* 隊) all bore distinctive names, of which about twenty appear in our documents. Those companies which can be shown with more or less probability to have held particular watch-posts or stations along the Limes have been mentioned above in the course of our survey of the ruins.[26] As regards the interpretation of the names, which mostly are meant to convey either triumph over the barbarians or prosperity and support for the dynasty, and in the remaining cases seem to be taken from localities, a reference to M. Chavannes' full explanations will suffice.[27] More important it is for us here to examine the question of the places in which the bulk of the men composing these companies were actually stationed. It is of special interest in view of what the discussion in the preceding section has shown us about the character of the system which provided for the construction and guarding of the Tun-huang Limes by means of 'agricultural colonies'.[28] Its examination may also help us to solve the difficulty which, as explained above, is presented by the limitation of the ruins traceable along the line of the Limes, and in particular by the very confined accommodation to be found in the quarters.[29]

Names and stations of companies.

Our inquiry is closely bound up with the interpretation of the term *t'ing* 亭, which repeatedly occurs in documents apparently relating to the location of companies. M. Chavannes translates the word by 'station' and assumes that it designated small military stations, each holding one company (*tui*), established along the north-western frontier.[30] He rightly refers to documents, such as Nos. 432, 552, as proving that to one *t'ing* there corresponds one *tui*. But a careful examination of all documents shows us that the terms were not equivalent in practice, and further that the *t'ing*, in these parts at least, could not have stood on the Limes itself. On this point a doubt seems

Term *t'ing* relating to location of companies.

a 'deputy to a [*tu-*]*wei*', receives an order direct from the military commandant (*tu-wei*) of Yü-mên. No. 369 mentions a *ch'ien-jên* holding charge of a magazine (T. XVIII?); No. 370 one in command of a thousand cavalry.

[20] See *Doc.* Nos. 42, 43, 45, 49, 54, 56, 136, 157, 203, 204, 271, 377, 436, 463, 482, 484, 490, 562–5, 568, 572, 596, 600, 604, 681.

[21] Cf. *Doc.* Nos. 271, 562–5, 484.

[22] See *Doc.* Nos. 42, 43.

[23] Cf. *Doc.* No. 157.

[24] Cf. *Doc.* Nos. 49, 681, and below, p. 752.

[25] See *Doc.* No. 377.

[26] Cf. above, pp. 596, 598, 648, 659, 668, 670, 699, 717, 719.

[27] Cf. *Documents*, p. x. Thus we have the companies *Ling-hu* 'which oppresses the barbarians (*hu*)', *Yen-hu* 'which represses the barbarians', etc.; or *Yang-wei* 'which raises the prestige', *Ngan-han* 'which assures peace for the Han', *Kuang-hsin* 'which aggrandizes the Hsin dynasty (of Wang Mang)', etc.

To the dozen names quoted by M. Chavannes, *Doc.* p. x, may be added those of *Ch'ing-tui*, *Doc.* No. 274; *Chu-chüeh*, Nos. 484, 693; *Fou-ch'ang*, No. 150; *Hsien-ming*, Nos. 587, 588, 597; *Shu-hsiang*, No. 485; *I-ch'iu*, Nos. 463, 464, 470, etc.; *Kao-wang*, Nos. 439, 565, 613; *Ngan-t'ien*, No. 562.

[28] See above, pp. 740 sqq.

[29] Cf. above, pp. 738 sqq.

[30] Cf. M. Chavannes' remarks, *Documents*, pp. x, 54 (on *Doc.* No. 198).

a priori all the more justified because in Former Han times the term *t'ing* was regularly applied to an administrative subdivision comprising 10 li 里, or groups each of twenty-five families. That its meaning could not have been very different as used in the Tun-huang area and its military colonies is brought out quite clearly by an analysis of the dozen odd documents in which 'T'ings' are mentioned.

The *t'ing* an administrative area maintaining a company (*tui*).

The discussion in the note below[31] shows us that the term *t'ing*, as used in our documents, designated a small area, situated within the oasis but under military administration, the population of which was expected to maintain a company (*tui*) for the guarding of the Limes and, in case of need, for military service beyond it. In addition to the contribution in men, the T'ing had evidently, in keeping with its character as part of an 'agricultural colony', to furnish certain supplies of grain to the military magazines of the Tun-huang command.[32] That the food-supplies which company commanders issued to their men[33] also came from the stores of the respective T'ings is very probable. Thus the T'ing was both the permanent recruiting area as well as the supply base in ordinary times for the company contingent which it furnished. Considering that besides providing the usual pickets for one or more watch-towers on the Limes the 'company of the T'ing', as the documents call it, might be called up as a whole for service in case of emergency, it is easy to recognize that the maintenance of two distinct appointments, of 'head of the T'ing', *t'ing-chang*, and of 'company commander', *tui-chang*, was a reasonable, nay necessary, arrangement. It seems clear that a village group of such size as the notice in the Former Han Annals referred to above indicates, viz. one comprising about 250 families, could, under the defensive arrangements necessitated by border conditions, raise a body of men approximately corresponding to a modern company.[33a]

Strength of a *t'ing's* contingent.

Fortunately we have a document directly confirming this in No. 198, T. VI. b. i. 64, which states: 'the aforesaid hundred and forty-five men are soldiers of the *t'ing*.' Though the wording does not explicitly show that this was the total number of the contingent, it yet appears reasonable to conclude from this, with M. Chavannes, that the average effective strength of each company was about a hundred and fifty men.[34]

[31] In the first place we should note *Doc.* Nos. 207, 273, 415, in which mention is made of 'heads of *t'ings*' 亭長, these being clearly distinguished from the commandants of companies. No. 273 is of interest because it is a general order 'to be posted at the *t'ings* of the barrier', directing that 'when the companies of the northern barrier have set in movement', reports are to be sent regularly southward to the heads of *t'ings*, etc. That *t'ings* were situated within the cultivated area is indicated by No. 415, which is a receipt from an official of the granary T. XVIII for two cart-loads of grain furnished 'by the head of the *t'ing* of the Wan-nien canton in the sub-prefecture of Lung-lo' from a specified acreage (for *Lung-lo*, containing the barriers of Yü-mên and Yang, see above, pp. 620 sq.).

The situation of a certain *t'ing* within inhabited ground is proved with equal clearness by No. 302, which reports the planting of ten elms 'in the *t'ing* of Ch'in-su, dependent on the *hou-kuan*'. We have seen that this term designates a sub-section of the administrative area of the Limes. Yet it is certain that then, as now, elms could grow only within cultivated ground, and not at desert stations.

In No. 536 we have a notice intended for circulation 'in the company of the Yü-mên barrier', issued by a post-commandant after an official inspection at which certain men had been found absent, and urgently requesting that a certain 'soldier of the barrier should on no account be allowed to leave the *t'ing*. A *Yü-mên kuan t'ing* is directly named in the fragment No. 357. In No. 681 we are told of a certain indigenous officer and the captain of the Tang-ku company having left the area of the *t'ing*. No. 172 reports the approach of an armed horseman towards a *t'ing* and orders troops to be on their guard and fire-signals to be watched at the Limes towers. *Doc.* Nos. 432, 460, 552, which mention 'the company of the *t'ing*' in connexion with movements or fire-signal service, furnish no definite evidence. The interpretation of the *t'ing* referred to in No. 592 seems doubtful; for No. 198, see the text above.

[32] Cf. above, note 31, for No. 415; also above, p. 747, for No. 157, which mentions the deputation of certain company commanders for service at granaries.

[33] See above, p. 747.

[33a] The poem of the third century A.D. quoted by M. Chavannes, *Documents*, p. xxii, shows how heavy the incidence of military service on the frontier might be. It tells of a householder there being called up thrice in one year and of five of his sons being away with the armies.

[34] Cf. *Documents*, p. x. It should be noted that this record must, in view of what has been explained above, pp. 647 sq., date back to the first half of the first century B.C.

Border troops settled in inhabited area.

Before proceeding further, it is appropriate to point out that there are other documents also, besides those referring to 'T'ings', which prove that the permanent location of the border troops was within the inhabited area. Thus in *Doc.* No. 173 we read of the 'walled town', *ch'êng* 城, of a company (*tui*) having been taken and burned by brigands who killed two hundred and twenty people. The reference is here clearly to one of those walled enclosures, now known as *p'u-tzŭ*, which are still to be found everywhere on the Kan-su marches, sheltering villages or else meant to be used in troubled times as places of refuge by the occupants of scattered hamlets and farms.[35] In No. 189 some officer, evidently concerned with the settling of military colonists for the Limes, reports that a certain 'locality is not unsuitable as regards . . . the sowing of crops; but it is not possible from there to exercise watch and guard to a distance'. No. 496 records the allotment of thirty acres (*mu* 畝) of land to a certain settler, evidently arrived from a distance for service on the border. Nor is the record in No. 699 of grain issued for members of different families, including children and a girl, likely to have found its way to an outlying watch-post on the Limes wall if the men placed there on duty had not had their families in the newly settled parts of the inhabited area.[35a]

Watch-towers guarded by individual companies.

We have already seen that the chief routine duty of the company units was to supply the pickets which were stationed at the different watch-towers and posts. It is in connexion with this service that the references in our documents to individual companies and their captains are most frequent. The survey of the remains of the Limes, as contained in Chapters XV, XVII–XIX, has already given opportunity for showing how the guarding of particular watch-towers and the adjoining portions of the Limes wall was entrusted to certain individual companies.[36] There is, therefore, no reason once more to follow up here the details of this allocation, which in some cases at least may be supposed to have remained unchanged for considerable periods, as far as the company units were concerned. That the men actually on picket duty were posted and relieved in rotation may, in view of all that has been explained above as to the trying conditions of life at these exposed desert posts, the agricultural obligations of the soldier colonists, etc., be safely assumed, even though I can trace only one apparent reference to the point. It is furnished by the label-shaped document No. 616, which contains the heading: 'List of soldiers such as is to be made out for (or at) the four seasons of the year.' If my assumption is right, it would follow that each term of duty on guard extended to one season. But, of course, a different interpretation could also be thought of.[36a]

Officers in charge of watch-towers.

The watch-towers are designated in the documents either as *hou* 候 or *fêng hou* 烽候 or simply *fêng* 烽. As to the significance of these terms and their use in historical texts I must refer to M. Chavannes' explanations.[37] The officers in charge of the watch-towers bore the title of *hou-chang* 候長, 'commandant of the watch-tower'; references to them in the documents are almost as frequent as those to the captains of companies.[38] They were, no doubt, primarily responsible for the maintenance of discipline, the efficiency of the guard and signal service, supply of rations, etc., at their posts.[39] The fact that they are frequently designated by the addition of

[35] Cf. regarding these *p'u-tzŭ*, *Desert Cathay*, ii. pp. 8, 40, 235, 267, 298, 332.

[35a] In No. 617 we read of an order to be sent 'to the commandants of watch-posts and to the company residences 隊次'.

[36] Cf. above, p. 747, note 26.

[36a] No. 193, not completely legible, states: 'twenty-nine men will mount guard'.

[37] Cf. *Documents*, p. xii. The word *fêng* 烽 in its original application designates the stacks of wood lit to produce heavy smoke for signal purposes in daytime; see *ibid.* p. xi.

[38] Cf. *Documents*, p. xi, note 2, for a list to which Nos. 309, 570, 574 should be added.

[39] Thus, e.g., in *Doc.* No. 439 the *hou-chang* of Kao-wang is directed to pursue certain deserters; in No. 487 another submits a list of soldiers and watch-dogs entitled to be furnished with rations; Nos. 80–3 show commandants of watch-posts or their deputies (*hou-chih*) passing with official orders, etc.

the local name borne by their particular watch-tower, without that of the company which furnished the picket on duty there, may possibly indicate prolonged local stationing of these officers.[40] In any case, this would have presented obvious administrative advantages. It should be noted that we have in No. 483 a direct order from the *tu-wei* of the Jade Gate addressed to a watch-tower commandant. Similarly the order conveyed in No. 55 to a *hou-chang* to appear at the official residence emanates from a *ssŭ-ma*, i. e. a superior officer attached probably to a *tu-wei*.[41] On the other hand, subordination of the *hou-chang* to the commander of his company is distinctly proved by the order contained in No. 377. The *hou-shih* 候史, who are repeatedly mentioned in the documents in connexion with duties similar to those of the *hou-chang* and several times are named immediately after them, evidently were employed as their deputies and assistants.[42] The curious pay statement preserved in No. 62 shows clearly the modest nature of their emoluments, amounting to twenty 'pieces of money' per diem.

Subordinate officers along the Limes line.

The curious specification, No. 592, concerning the corporal Wang, to which reference has been made above,[43] shows us that under the *hou-chang*, who was 'graded' as an officer, there were placed directly the rank and file of the men on duty along the Limes.[44] But that there were other officers also employed on duties connected with it is shown by two records, Nos. 452, 378, which mention a *wei-shih* 尉史 and a *shih-shih* 士史 respectively. M. Chavannes' note on the former quotes the statement of a commentator on the Former Han Annals according to which 'in all commands along the barrier there were placed officers called *wei* 尉, one for every hundred li; there were besides [under each *wei*] two *shih-shih* and two *wei-shih* who were charged with inspecting the frontier'.[45] Another, perhaps, more specialized function may have been that of the '*sê-fu* of the pass (*kuan*), 關嗇夫', to whom two documents from the Jade Gate, T. XIV, Nos. 367, 373, briefly refer.

Origin of rank and file named in documents.

It still remains for us to consider what the documents can tell us about the rank and file of the troops which kept watch and guard on the Tun-huang Limes. The very character of the petty records recovered from the ruined watch-stations accounts for the relative frequency with which we find individual soldiers of humble condition mentioned in them. M. Chavannes has already called attention to the interesting information to be gathered about the origin of the men from those numerous documents which name them with a precise indication of the canton, sub-prefecture, and command from which they came.[46] Referring to his analysis for all details, it will suffice here to state that the soldiers thus specified belong to two groups approximately equal in number. One comprises twelve men from distant provinces, mainly Shan-hsi and Ho-nan; the other is made up chiefly of men from Tun-huang (eight) and two more born in the command of Kan-chou.[47] M. Chavannes has duly pointed out that the class brought from a distance is much the larger among the men mentioned in the records from T. VI. b, which belong approximately to the period 65–57 B. C.,[48] and that the opposite holds good of those named in documents from other watch-

[40] Cf. Nos. 58, 168, 309, 314, 487, 492, 571, 662. In Nos. 439, 613 the name (*Kao-wang*) seems to have been borne both by the locality and by the company which garrisoned it.

[41] Cf. above, p. 746, about *ssŭ-ma*.

[42] Cf. *Doc.* Nos. 66, 552, 553, where the *hou-chang* and his *hou-shih* are named one after the other. No. 262 is an issue order for fodder to be taken from the *hou-shih* of a certain watch-post. For other documents see Nos. 81, 190, 405, 459, 460, 542.

[43] See above, p. 746.

[44] In No. 574, however, we see yet another grade, that of *tsao-shih* 造史, inserted under the *hou-chang*, 'to command non-commissioned officers and soldiers'.

[45] No *wei* appears to be mentioned in our documents. A *wei ch'êng* 尉丞 is referred to in No. 318, but without any indication of his function. In No. 436 a *wei-liang* 尉良 is mentioned as under the company commander of Ta-chien-tu.

[46] Cf. Chavannes, *Documents*, pp. ix sq.

[47] It is to be regretted that in the document No. 392, T. XVII. 2, of 58 B.C., which gives a list of thirty-two men, the place of origin can be made out for three only.

[48] Out of the eight men mentioned in Nos. 43, 62, 72–5, 77, 183, there are five from Shan-hsi, one from Ho-nan, another from Ssŭ-ch'uan, and only one from Tun-huang.

stations (T. IV. b, XII. a, XIV, XV. a, XVI, XVII, XVIII, XXVII), the occupation of which, as we have seen, continued down to later periods.[49]

'Garrison soldiers', i.e. convicts, as border colonists.

From this we may be tempted to draw the reasonable, if conjectural, conclusion that during the early times of the Limes extension the body of the border troops had to be made up by soldier colonists brought from other parts of the Empire, while later on the ranks could be filled more easily with local men drawn from the north-west marches themselves. I think that this conclusion receives a distinct and interesting support from another observation also. Among the twelve men from distant provinces not less than eleven are mentioned with the special designation of 'garrison soldiers', *shu-tsu* 戍卒,[50] whereas we never find this term applied to any of the men from Tun-huang or Kan-su. The true significance of the distinction becomes evident in the light of what M. Chavannes himself has rightly observed about the probability of the men from a distance having been convicts deported for border service. In the document No. 263, T. VI. b. iv. 1, we find in fact eight men, otherwise of unspecified origin, distinctly spoken of under the exact juridical term which, as M. Chavannes shows, was applied during Former Han times to convicts condemned to forced labour.[51] As Chinese historical texts definitely indicate the construction of defensive walls and the guard service on the frontier as the main kind of forced labour, we may conclude that these 'garrison soldiers' were convicts deported for service at the Limes.

Criminals impressed for Limes service.

Impressment of criminals for military service beyond the northern borders of the Empire appears to have been a method regularly resorted to in connexion with those distant expeditions which the Emperor Wu-ti's Central-Asian policy necessitated.[52] The historical records show what terrible losses and hardships they often implied. Permanent service on such lines of the Limes as that of Tun-huang, passing through absolute desert, must have been equally trying. The very interesting specimens of Chinese poetry which M. Chavannes at the end of his *Introduction* has reproduced and translated from the literature of the T'ang period[53] give eloquent expression to the dread with which those expeditions and forced service on the border alike were remembered even centuries later. It seems very probable that the majority of the men moved into the early 'agricultural colonies' were deported convicts, and that this class continued to be drawn upon to some extent later, too, as a supplementary source in addition to the men furnished by the local border population. But the documents do not reveal to us the changing proportion of the convict contingents brought from afar for the Limes service of Tun-huang. Nor could the dry details of petty routine, which form the bulk of their contents, be expected to give us such vivid glimpses of the personal trials and sufferings undergone by the exiles as those poems just referred to. We have, however, evidence of an incident such as must have been common under these conditions of recruitment and service in No. 439, which orders the pursuit of deserters by the commandant of a certain watch-post.

Mounted soldiers on Limes.

That some of the soldiers stationed at the watch-towers were mounted men is distinctly mentioned in a number of records.[54] The abundant remains of horse-dung found in the refuse-

[49] Among the fourteen men who are there named, seven are natives of Tun-huang (Nos. 392, 574, 579, 580, 592), two of Kan-chou (Nos. 342, 417). Only three are from Ho-nan (Nos. 416, 434, 456), and two more from Shan-hsi (No. 550).

[50] In the case of the twelfth man (*Doc.* No. 183) the incomplete record leaves a doubt as to his employment as a soldier or otherwise.

[51] Cf. M. Chavannes' note on *Doc.* No. 263.

[52] Cf. references in Ssŭ-ma Ch'ien's chap. cxxiii, as translated by Kingsmill, *J.R.A.S.*, 1882 (reprint), pp. 16, 24. Parallels in the history of more than one country of modern Europe are not difficult to find.

[53] See Chavannes, *Documents*, pp. xvii–xxiii. The last poem is of special interest to us because it shows that the demands of military service might claim the whole family of a settler on the border. It thus helps to support what has been stated above, p. 748, about the numerical relation between the *tui* and the *t'ing* which maintained it.

[54] Cf. *Doc.* Nos. 279–83, 286, 416, 417.

heaps, and even within the confined quarters, would also have sufficed to prove it. No doubt, mounted men were often employed for the rapid transmission of letters and messages, as seen from Nos. 614, 662. Apart from the men on picket duty, we find that soldiers passing by on the march are referred to in connexion with the issue of supplies, e.g. the 'soldiers of the escort' in No. 602, or the eighty-seven soldiers accompanying the envoy to Yārkand, No. 311. Finally, it may be noted that the monthly indent for food-supplies from a certain watch-post commandant, No. 487, T. xv. a. ii. 6, includes not only the men but also watch-dogs. They were to receive rations, being evidently kept on the sanctioned strength of the picket. Here, too, we see modern developments anticipated.

Watch-dogs on ration strength.

'Indigenous functionaries' on Limes.

In order to conclude our review of the personnel of the Tun-huang Limes it only remains for us to consider the references repeatedly made to the *t'u-li* 土吏, 'indigenous functionaries' or 'local authorities', as M. Chavannes translates the term elsewhere.[55] We have already had occasion, in connexion with stations of the extreme south-west flank of the Limes, to notice their employment on the border-line.[56] A number of documents, naming them either together with watch-post commandants or as recipients of orders from such and other Chinese officers,[57] make it quite certain that they had a regular share in the control and protection of the Limes. That it was a subordinate one may safely be concluded from the low rank of those from whom orders to them emanate. Yet such an order as that contained in No. 150 concerning the supervision of the traffic going and coming through 'the pass' shows that the service with which they were charged had its responsibilities also. It seems on every ground very probable that their position in many respects, as far as administrative control of non-Chinese natives was concerned, may have closely resembled that occupied by the 'Bēgs' of modern Turkestān, whom Chinese petty officials are only too ready to burden with a great part of their own official duties.

Indigenous population on Kan-su border.

That some indigenous population had remained on the north-west marches of Kan-su after the first conquest of these from the Hsiung-nu we shall have occasion to mention.[58] The constant and increasing passage of trade caravans, political missions, and military forces is likely to have brought it additions from the Tārīm Basin, just as Tun-huang at the present day has its, albeit small, foreign colony. A surmise as to the presence of an Īrānian element in that population has been hazarded above on the strength of the tally tablet in Early Sogdian script found at T. vi. c.[59] The Chinese reproduction of such 'indigenous functionaries'' names, as found in Nos. 138, 140, 150, furnishes no safe indication. But we may, perhaps, recognize with M. Chavannes a reference to this indigenous non-Chinese population in the record No. 433, T. iv. b. i. 6, which complains: 'The ramparts are in ruin and are not kept in repair. The population and the soldiers of the garrison do not live on good terms.'

Section VI.—SERVICE AND CONDITIONS OF LIFE ON THE LIMES

Fire-signal service on watch-towers.

Among the duties which kept the small detachments at the watch-towers of the Limes occupied attendance to the service of fire-signals was of particular importance, and as the information to be gathered about it from the documents is very clear, we may well notice it first. The evidence collected by M. Chavannes from Chinese historical texts[1] proves that a system of optical telegraphy

[55] Cf. *Documents*, p. x.

[56] See above, pp. 648, 653.

[57] Cf. *Doc.* Nos. 51, 138, 139, (140?), 143, 144, 150, 552, 681. In Nos. 49, 145 they are referred to in reports. No. 375 introduces a certain 'local official' as bearer of a communication to the governor.

[58] See below, chap. xxvii. sec. iii.

[59] See above, p. 654.

[1] Cf. *Documents*, p. xi.

by means of signal-fires, to give the alarm in case of attacks on the border, was in use before Han times. A distinction is made in those texts between fires, called *fêng* 烽, which were intended to produce thick smoke for signalling in day-time, and others, known as *sui* 燧, the clear flame of which was to be visible at night.[2] Thus the general Ma Ch'êng, who in A. D. 38–43 organized the northern frontier defences along certain stretches, is said to have 'organized fire-signals for the day (*fêng*) and night (*sui*). There was a watch-tower at every 10 li.'[3] In practice the term *fêng* came to be applied to any signal-fire, and it is thus that the watch-towers, which in our documents are ordinarily designated by the term *hou* 候, are sometimes in the texts called also *fêng hou* or simply *fêng*.[4] A passage quoted by M. Chavannes from a text of T'ang times adds an interesting detail which indicates a further development in the system of signalling: 'The watch-towers were on the average 30 li from each other; when they lit fire-signals, they produced one flash *chü* 炬, or [in succession] two or three or four flashes in accordance as the invaders were more or less numerous.'[5]

Signalling by flashes.

It is easy to realize the importance of the help which a carefully maintained signal service of this kind could afford for giving the alarm to the Limes troops and effectively warding off raids or more serious attacks. M. Chavannes quotes passages from the Former Han Annals emphasizing this importance, and we find it fully reflected also in the document No. 432. This notice, 'to be posted in a visible place of the [locality of] the company of the *t'ing* so that all may know by heart and understand it', directs 'that a perfect supervision should be kept, and that, as soon as there may be a fire-signal, the company of the *t'ing* should light one in turn. Let there be no negligence.' We can, therefore, appreciate the contrition with which, in *Doc.* No. 567, an officer of the 'Yi-ho barrier' accuses himself of not having 'properly observed in the supervision of the fire-signals' and expresses the wish to denounce himself by a deposition at headquarters.

Importance of signal service.

The distinction between smoke-signals for day-time and fire-signals for the night is duly made in *Doc.* No. 552, which we had occasion before to discuss in another connexion.[6] A further detail recorded in the above passage of the T'ang text receives confirmation from a series of documents from T. VI. b, Nos. 84–7, which record the reception of flash-signals, here called *chü huo* 苣火 (literally 'torch fire'). The time of reception is exactly indicated by month, day, and hour; the eastern direction from which the signals came is noted, and in one case also the name of the man who had made the observation. As a curious relic may be mentioned the large but not completely preserved board-like tablet, No. 278, T. XXII. b. 6 (Plate IX), bearing the inscription, obviously meant as a label: 'Signal-fire of the Ta-wei barrier'. Its original application is doubtful. Uncertain, too, seems the interpretation of Nos. 694–5, apparently fragments of the same document, in which the pole of a burning stack, 30 feet long, and a difficulty about extinguishing the fire are mentioned.

Records of smoke and fire signals.

It is obvious that if the bulk of the troops kept available for the safeguarding of the Limes were, as we have seen good reason to believe, maintained, as military colonists or otherwise, within the

[2] In one of the passages quoted from a poet of the second century B.C. in Ssŭ-ma Ch'ien's *Shih-chi*, *ibid.*, we read: 'As soon as the soldiers of the frontier commands learned that the bonfires for day-time had been set ablaze or the fires for the night-time been kindled, they all took their bows and started off at a gallop, armed themselves, and departed.'

[3] Cf. Chavannes, *Documents*, p. xii, with note 1 for reference to the *Hou Han shu.*

[4] M. Chavannes, *ibid.*, points out that in Hsüan-tsang's *Life* the five watch-towers, each at 100 li distance, which were to be passed by the pilgrim after leaving the Jade Gate, and to which detailed reference will be made below, chap. XXVIII. sec. i, are called *fêng* 烽.

[5] Cf. *Documents*, p. xii, note 5. The production of successive flashes was easy if use was made of a torch, a meaning which the word *chü* 炬 seems also to bear. It is easy to see that modern flash-light signalling (on the Morse system) meant only a slight step forward. [For Mr. Hopkins's different interpretation of the passage quoted by M. Chavannes, cf. *Add. & Corr.*]

[6] Cf. above, pp. 709 sq., where a possible location of the watch-post referred to as being too far for the observation of signals has been suggested

Fire-signals to stations within cultivated area.

inhabited area, there must have been also arrangements for transmitting fire-signals from the line of the wall to the military headquarters and to the *t'ings* inside the oasis.[7] Even now there are plenty of watch-towers to be found within the cultivated area of Tun-huang and the border districts eastward which may at one time or another have been used for similar purposes.[7a] But as they are built mostly with layers of stamped clay, and no datable remains are traceable on the surface near them, it is impossible to determine their age. We may, however, probably recognize a reference to such signal-stations at a distance from the Limes wall in *Doc.* No. 61, which gives 'a list of the fire-signals in the [military district of the] *Yi-ho tu*-[*wei*]', and among the names mentioned for them we find such as *Kuang-chi*, *K'un-lun*, and *Yü-tsê*, which can otherwise be proved to have been those of headquarters stations within the command of Tun-huang.[8]

Traces of signal-fires.

We have other relics of the fire-signal service once maintained along the Limes, besides the watch-towers themselves, which, as their shape and position show, must have been primarily designed for that purpose. Where the tops of the towers were still intact or accessible, I could often trace the mark left by the fires once lit there in the burnt red colour of the clay or brickwork.[9] But even the perishable materials used for these signal-fires have survived in places to the present day.

Stacks of fascines for signal-fires.

In the light of the evidence of the above-quoted texts and documents, it can no longer be doubted that the regular stacks of fascines, made up of reeds, brushwood, or Toghrak branches, which I found near a number of watch-towers, T. VI. b, XI, XII. a, etc., either in a half-petrified condition or else reduced to small calcined fragments through burning,[10] had been prepared and kept ready mainly for use in signal-fires. When lit on the spot, they would produce those columns of thick smoke, the true *fêng* 烽, which, as we have seen, were needed for signalling in day-time. At the same time the fascines could equally well be carried off for use as torches for night-signalling on the towers, or put to more homely use in keeping fires going in the picket's modest quarters. The number of fascines needed both in the construction of the wall and for constant supply at the watch-towers must have been very great. Hence it seems very probable that, as suggested by M. Chavannes, fascines are meant in the fragmentary slip No. 609, which mentions a total of 42,330 bundles, *shu* 束, i. e. faggots.

Look-out kept at watch-towers.

That keeping a careful watch and guard along and beyond the Limes wall was an essential duty for the small detachments posted at the watch-towers does not need special proof. We find this duty often referred to in the documents by the term 候望, which M. Chavannes has fully explained.[11] One document, No. 555, where a modified term is used, distinctly tells us that out of four soldiers on duty on a certain date 'one constantly mounted guard', while two others collected fuel and the fourth apparently acted as cook. Elsewhere, too, similarly plain references are coupled with records of 'fatigues'.[12] But more curious is the nexus in which we find this duty of watching enjoined in the fragmentary order No. 265. M. Chavannes translates it: 'Keep your look-out with zeal; clearly *delimitate the celestial fields*; observe the movements which take place beyond the frontier; whatever you learn, at once . . .'

The phrase *hua t'ien t'ien* 畫天田, of which the words in italics in the above translation are

[7] It is likely that the line of watch-towers traced from T. XIV south towards the extreme end of Nan-hu cultivation near T. XVIII. a, b, served such a purpose, and that they existed before the secondary wall, discussed above, pp. 691 sqq., was built along it.

[7a] The lighting of signal-fires as a means for assuring safety against attacks is specially referred to in the votive inscription of a woodcut, presented by an officer of the Tun-huang force, probably in the tenth century; see M. Petrucci's remarks on Ch. 00205, in Appendix *E*, I.

[8] Cf. the text quoted in M. Chavannes' note, *Documents*, p. 26, on No. 61; also *Doc.* Nos. 398, 462.

[9] Thus, e.g., at T. VI. c, XIV, XIX, XXI, XXIII. a, etc.

[10] Cf. above, pp. 650, 677 sq., 711. As explained there, the regular 7-feet size of the fascines in these stacks proves that they were available also for any repairs which might be necessary in the Limes wall.

[11] Cf. *Documents*, p. xiii; also p. ix, note 3; *Doc.* Nos. 60, 189, 265, 432, 495, 623.

[12] See No. 279, 281, where the plain *hou* 候 suffices to indicate the guard-mounting.

meant to convey the meaning, recurs in a number of documents. It offers difficulties of interpretation, though its meaning word by word is clear. M. Chavannes, who has fully discussed it, hypothetically assumes it to refer to the clearing away of reed-beds and jungle.[13] This would certainly have been needed almost in any locality within the areas of Tun-huang or Nan-hu before it could have been brought under new cultivation by an 'agricultural colony', and in a few records the mention of 'celestial fields' seems to me quite clearly to refer to such reclamation for agricultural purposes.[14] Nevertheless the mention in the above-quoted document No. 265 of 'the delimitation of celestial fields' in the midst of injunctions undoubtedly relating to the watching of the border-line looks decidedly strange if in reality here, too, the preparation of ground for cultivation is intended. In the vicinity of T. vi. c, where this record was found, cultivation was certainly impossible, while the clearing away of the abundant reeds, tamarisks, and other scrub would obviously have facilitated the look-out. The same applies, of course, also to T. vi. b, the find-place of Nos. 88–91, which all refer to 'the delimitation of celestial fields' performed by certain men in the course of their 'fatigue' duties. I must leave here the question as one which, anyhow by the non-Sinologist student of the Limes, cannot be definitely settled with the available evidence. 'Delimitation of celestial fields.'

What the documents otherwise tell us about 'fatigues' of the men is quite clear, and gives us interesting glimpses of the daily routine observed at the small watch-posts and the careful way in which a record was kept of it. We thus find statements of brick-making done, no doubt for towers or quarters, with exact details as to the number of men employed, the number of bricks made or carried by each per diem, etc.[15] Similarly there are statements as to plastering work done on walls and roofs, the exact surface covered by each man being indicated down to square feet and inches.[16] We have careful records of the distances covered by small fatigue parties collecting and bringing materials or supplies, such as firewood, hemp for shoes, plaster or grain, the total distances and the number of days spent being usually indicated for the aggregate of the men as well as the performance in *li* and steps for each individual man.[17] The object aimed at, no doubt, was an equitable allotment of duties. The lightest among them was obviously that of acting as cook for the rest, which we also find repeatedly noted.[18] There are records, too, of exemptions from service for particular days granted to individual soldiers or of general suspension of work.[19] 'Fatigue' statements for brick-making, etc.

[13] Cf. *Documents*, p. 32, note on No. 88. The words 'celestial fields' are supposed by M. Chavannes to have been applied to the waste lands which the Government assigned to newly founded military colonies. To the term *hua* 畫, which literally means 'to draw', 'mark off' (see Giles, *Chinese-English Dictionary*, p. 622), he is led to assign the meaning 'to delimitate' and inferentially 'to clear', when used with reference to land which first needed clearing of brushwood, etc., before it could be brought under cultivation. Following up a suggestion thrown out by me (*Desert Cathay*, ii. p. 150), he seems inclined to believe that the 'clearing' spoken of in *Doc.* Nos. 88–90, where the work done by certain men is measured by distances only, in *li* and steps, and not by square areas, refers merely to the clearing away of reed-beds and other wild growth which might have interfered with the safe watching of the ground near the Limes.

[14] Particularly clear is this reference in No. 433, mentioned above, p. 752: 'The ramparts are in ruin and are not kept in repair. The population and the soldiers of the garrison do not live on good terms. The celestial fields are not ploughed (*kêng* 耕), the delimitation (*hua* 畫) is not clearly arranged.' Similarly we are told in No. 495: '. . . a single man to keep a look-out, to delimitate and arrange (*hua chih* 畫 治) the celestial fields, the man's strength does not suffice.' In No. 290 'celestial fields within the section (*pu* 部)' are referred to, the latter term denoting an administrative subdivision commanded by a *tu-wei*; see *Documents*, p. 131; above, p. 745. In No. 289 also 'celestial fields' are referred to in a context suggesting, perhaps, cultivation.

[15] See *Doc.* Nos. 99–100, 279–87, 673; also M. Chavannes' remarks, p. xiv.

[16] Cf. *Doc.* Nos. 102–11. Two kinds of plastering seem to be distinguished, with straw and with *ma-fu* 馬夫. The nature of the latter material, which, as No. 92 shows, must have been obtainable within 3 li of T. vi. b, might, perhaps, still be determined by a closer examination of the wall-plaster in the ruined quarters of that watch-station.

[17] Cf. as regards collection of firewood Nos. 124, 555; No. 96, hemp collecting; No. 92, transport of *ma-fu* for plastering; No. 95, fetching of grain (cf. also above, pp. 648 sq.); Nos. 93, 94 for fatigue journeys without indication of specific tasks. For the curious method of reckoning used in these records, cf. M. Chavannes' notes, pp. xv, 34.

[18] See Nos. 279–83.

[19] Cf. Nos. 91, 158–60.

Records of postal service.

A number of records prove the maintenance of a postal service along the line of watch-towers, the dates of receipt and dispatch of letters, with their numbers and addresses, being duly noted.[20] In one case (No. 614) it is specially recorded that the communication was brought by a mounted man. As M. Chavannes has duly pointed out, provision for sending urgent orders, etc., along the wall by means of couriers using relays of horses was important for occasions when atmospheric conditions rendered the use of fire-signals impossible. A poem of T'ang times which he quotes puts the transmission by this method of a report concerning a Hsiung-nu attack on the westernmost Limes graphically before our eyes.[21] To M. Chavannes, too, we owe the right explanation of the numerous 'slips' found at different watch-posts which merely announce messages from certain officers or are confined to the dispatcher's name and the date. These were, no doubt, meant to accredit persons entrusted with verbal orders or communications to the respective recipients.[22]

Control of traffic through Limes 'barrier'.

We have already had many occasions to observe that the control of those who entered or left the 'barrier' of the frontier must have formed an important duty for the officers and men stationed on the Limes.[23] References to this passage across the guarded border-line are frequent in the documents. It is significant that almost all these were found at watch-stations which by their very position necessarily played a prominent part in the exercise of control over this trans-border traffic. Thus at T. VI. b we have documents enjoining strict compliance with the official orders about 'the men, domestic animals, carts, and arms which leave or enter through the pass'.[24] At T. XIV, the Jade Gate headquarters, we find an order to the captain of the company there stationed prohibiting for the time being the departure from the 'pass' of caravans that transport objects other than those of ordinary use.[25] From T. XV. a, the place where, as we have shown, the 'new route of the north' passed out of the line of the Limes, comes a document referring *inter alia* to the regulations which concern 'the leaving and entering' (*ch'u ju* 出 入) of the barrier.[26] From the same three watch-stations we have also plain records of specified soldiers having passed, or being about to pass, outside the barrier on particular dates.[27] I may here conveniently mention that all references we have to carts, such as, no doubt, were used largely for the traffic which passed through the barrier, are found in documents from T. XV. a or T. XI, the latter a watch-post on the actual caravan route as followed to this day.[28]

Receipts for food-supplies.

The importance of careful arrangements for provisioning the detachments on guard and the troops passing along the desert Limes has been duly emphasized before. Details connected with these supply arrangements are referred to in numerous documents. Particularly frequent are receipts for food-stuffs, usually specified as wheat, millet, or rice, issued to individual soldiers or groups, and other similar statements.[29] Three such records, Nos. 563–5, dating from A.D. 50 and 53, are of special interest as they mention specified food contributions received by certain soldiers

[20] See Nos. 275, 367, 454, 455, 614, 615. In Nos. 80–83 the dispatch of 'official tablets', bearing registration numbers, through subordinate officers is recorded.

[21] See *Documents*, pp. xii sq.

[22] Cf. Chavannes, *Documents*, p. xv, with detailed references; also p. 21 on No. 45, where he justly points out the analogy furnished by the fact that many of the 'demi-official' Kharoṣṭhī wedge-shaped tablets found by me at the Niya Site were still unopened. See also above, p. 653, note 5.

[23] Cf., e.g., above, pp. 655, 677 sq., 691, 693, 709, 733.

[24] See Nos. 148, 149, 150.

[25] Cf. No. 379, T. XIV. i. 9. No. 380, T. XIV. i. 10+19, is an urgent order which apparently gives authority for allowing certain persons to proceed on reaching Yü-mên.

[26] See No. 553; for the position of T. XV. a, cf. above, pp. 705 sqq.

[27] Cf. *Doc.* Nos. 67, 219, 541. No. 436, from T. V, seems to record the arrival of a certain official bringing arms and the time when he passed the barrier (*ju kuan* 入 關).

[28] See *Doc.* Nos. 466, 475, 688; above, pp. 666 sqq.

[29] See *Doc.* Nos. 223, 226–8, 326–8, 405, 406, 418, 428, 435, 441, 602.

For lists of documents specifying the several kinds of food-stuffs (wheat, millet, rice), see *Documents*, p. xiv, notes 7–9.

from the captain of their company who made delivery on behalf of particular individuals. This suggests that the duty of maintaining the men stationed for the time being along the wall fell upon the *t'ing* from which they were drawn, and was looked after by the captain of its company.[30] It is on this assumption that we can also best explain receipts given by scribes for certain monthly contributions of food-stuffs which had been furnished by the captain or individual soldiers of specified companies or cantons of the Tun-huang area.[31] With such documents, we may, perhaps, group also other records which contain receipts for food-stuffs or statements of account given by officers of the Limes or others, less clear in their bearing or incomplete.[32]

Grain delivery and issues at magazine.

To a different category belongs the interesting record No. 415, already discussed, from the great magazine of the Limes, T. XVIII, in which some official of the granary acknowledges the receipt of two cart-loads of grain delivered by 'the chief of the *t'ing* of the Wan-nien canton.'[33] Such supplies are most likely to have been stored at the magazine for meeting the needs of troops, political missions, and the like moving along the route to or from Lou-lan. Two documents from the Jade Gate, which we have already had occasion to mention, furnish us with actual records of grain issues made for this purpose to certain attendants and to the escort of eighty-seven soldiers accompanying a Chinese envoy to So-chü or Yārkand.[34] It is from these records and some others of similar kind, also from T. XIV, that M. Chavannes has been able to determine the regular daily ration for each man as 6 *shêng* 升, or Chinese pints, of grain.[35]

Calculation of soldiers' service period.

Whether the common soldiers received pay for the time of their actual service at the watch-stations of the Limes, besides being provided with food, is a point which the available documents do not enable us to decide. If the bulk of them were 'agricultural colonists', *recte* convict settlers forced to do military service, the absence of records concerning pay in cash for them could well be accounted for. Nevertheless the curious document, No. 592, from T. XII. a, furnishes very interesting evidence of the careful method with which in their case, too, as in that of officers, the length of service used to be calculated. The record concerns 'the simple soldier . . . corporal Wang', whose origin and subordination in the service we have already had occasion to discuss.[36] For the details of the reckoning by which the actual length of his service in A.D. 20–21 is determined as amounting to 355 days, I may refer to M. Chavannes' explanations.[37] What is of special interest to us here is the application of 'the rule according to which 2 days count as 3', resulting in the addition of a 'service supplement of 177 and a half days.' We have in this concession a clear recognition of the hardships involved in service on this desolate desert border.

Officers' pay records.

It is very probable that the same methods of calculation were applied also to the statements of total service which other documents, less detailed, record in the case of officers.[38] That officers

[30] For the relation which I have assumed between the agricultural settlements organized in *t'ing* and the companies maintained by them, cf. above, pp. 747 sqq.

[31] See *Doc.* Nos. 484–6, from T. XV. a, dated from A.D. 46–56. The individual soldiers who furnished the food contributions mentioned in the last two documents were obviously military settlers holding land in cultivation.

In Nos. 579, 580, from T. XVI, of A.D. 68, 77 respectively, the food contributions acknowledged are furnished by men inhabiting the Fu-kuei canton of Tun-huang. In No. 390, of A.D. 87, the person furnishing the contribution of 'granary wheat' to a certain watch-post commandant (*hou chang*) is described as a 'tenant' (*chiu jên* 僦人).

Perhaps some significance may be attached to the fact that all records mentioning such contributions date from the Later Han period.

[32] See *Doc.* Nos. 162–5, 220, 221, 271 (of 98 B.C.), 303, 441.

[33] See *Doc.* No. 415; above, p. 715.

[34] See *Doc.* Nos. 310, 311. The fragmentary record No. 336, which mentions the rationing of eighty-seven men, is also likely to refer to the escort of this envoy, as suggested by M. Chavannes. Cf. also above, p. 690.

[35] Cf. *Doc.* Nos. 310, 311, 326, 328, 336.

[36] See above, p. 746.

[37] Cf. *Documents*, pp. XV, 128.

[38] See *Doc.* Nos. 46, 394, 601, 642. In No. 601 we observe that, besides taking due note of 'short months' (twenty-nine instead of thirty days), a deduction appears to have been made for '5 days spent on travel'. Such rigorous parsimony might help to comfort those who are inclined to complain of the 'retrenchments' made by the Indian 'Military Accounts' Babu!

employed on the Limes drew pay, probably in addition to free rations, is proved by the document No. 62, from T. vi. b, which states the pay arrears of a certain *hou-shih*, or assistant commander of a watch-tower, for four months as amounting to 2,400 pieces of copper 'cash'. This works out at 20 'cash' pieces per diem. Modest, no doubt, as the rank of this subaltern was, one feels in view of such remuneration that to the China of the glorious Han times, too, there applied the old ditty: 'Le militaire de l'Autriche, tout le monde sait, n'est pas riche.'[39]

Cross-bows supplied for service.

If the reward accorded to the rank and file for the hard service on the border was scanty, there is at least plentiful evidence to show that the arms and equipment needed for it were provided and duly cared for by Government. Lists, orders, labels, and other documents relating to the arms kept at the various watch-posts are abundant. The principal armament of the Limes guards consisted of cross-bows; they are frequently mentioned and in several varieties. These are distinguished according to the force needed for stretching the string, and that itself is estimated by the weight which had to be attached in order to produce the corresponding pull. Thus the documents mention cross-bows of 3, 4, 5 and 6 *shih* respectively, the *shih* 石 being equivalent to 120 Chinese pounds.[40] In several cases we find the companies or soldiers specified in whose keeping the cross-bows were.[41] There is mention also of the *ta-huang* 大黃 variety of cross-bow.[42] In T. vi. b. 004 we have possibly the fragmentary remains of a cross-bow.[43] It is of interest to observe the care with which in No. 554 it is recorded of a cross-bow, originally of 6 *shih*, that its strength at the time of listing was reduced to 4 *shih* and 68 pounds. The supply of cross-bow strings appears to have been kept and accounted for separately, several kinds in silk and hemp being mentioned.[44]

Arrows issued for cross-bows.

As M. Chavannes has rightly observed, the fact that bows are mentioned only twice in our documents, and each time in the hands of barbarians,[45] clearly points to the soldiers on the Limes having been armed with cross-bows, not with bows. Hence it can be safely concluded that the arrows which figure so frequently in the arms lists and other documents were provided for cross-bows. Two types of arrows, designated as *mêng shih* 寅矢 and *kao shih* 槀矢, are distinguished; but we are left in the dark as to what the difference was. Preference was evidently given to the former type, as it is named far more frequently and in one label described as 'the *mêng* kind which triumphs over what is hardest.'[46] From the way in which the bronze points or heads for these arrows are mentioned apart in what manifestly were labels,[47] it appears to me very probable that the bronze arrow-heads were stored separately in bags or small boxes.

[39] Possibly the record of an officer's salary paid in another and more substantial kind of currency is preserved in *Doc.* No. 490, which mentions the captain of a certain company as having received '32 feet of silk fabric'. From M. Chavannes' supplementary note on the inscribed strip of silk, No. 539 (see above, p. 701), it is seen that according to a statement of the Later Han Annals a king of Jên-ch'êng in Shan-tung sent subsidies 'in coins and pieces of silk' for the frontier expenses at a time (A.D. 126–44) when 'the barbarians of Central Asia repeatedly revolted'. Could the piece of silk received by that captain have been meant for payment in a kind of silk currency?

It is true that the document No. 490 probably belongs to the time of Wang Mang, as the Kuang-hsin company seems to be named in it (see above, p. 670). But the use of silk as a sort of currency is likely to have been resorted to in China long before Later Han times. Silk is not among the local products of western Kan-su.

[40] Cf. *Documents*, p. xv, and references in notes 7–10 to the varieties of strength.

[41] See Nos. 64, 73, 74, 599, 676, 703, 705.

[42] See Nos. 119, 599.

[43] See above, p. 645, and below, p. 769 (Pl. LII).

[44] For hemp strings see Nos. 116, 119; for a silk string of the *fêng* 奉 type, No. 117; *fêng* cross-bow strings are mentioned also in Nos. 38 (see M. Chavannes' note on the term), 65, 598, 705. A case for a *fêng* cross-bow seems to be referred to in No. 115. In No. 624 we find the gratuitous loan of an iron hook for a bow-string by one man to another meticulously recorded.

[45] See *Documents*, p. xvi; Nos. 172, 548.

[46] Cf. *Doc.* No. 498; also Nos. 38, 71, 134, 253, 587, 682, 693. Arrows of the *kao* type are referred to in Nos. 125, 126, 266. In Nos. 41, 703 (incomplete) the type meant remains doubtful.

[47] See Nos. 125, 126, 266, 267, 498, 587, 693. The last five records have the shape of labels.

Such a method was obviously the most convenient for keeping this important item of ancient ammunition, which could not be replaced locally. In any case its use for transport is proved by the remarkable discovery made on my third expedition, when, in the desert to the north-east of Lou-lan, I found a heap of bronze arrow-heads of Han type lying close together as they had dropped out from some load of a convoy moving along the ancient Chinese route.[48] Bronze arrow-heads were discovered in considerable numbers during my explorations along the actual line of the Limes, both within and near the ruined watch-posts.[49] The different types and sizes represented among them will be found fully described in the List below, and are illustrated by specimens in Plate LIII.[50] It appears very probable that there was some specific relation between the several sizes represented among our finds and the cross-bows of different strength previously mentioned.[50a]

Finds of cross-bow ammunition.

The entries on the labels indicate that the arrow-heads, as stored, no doubt, for reserve use, were in packages each containing a hundred or multiples of it.[51] The regular complement, on the other hand, of fully fitted arrows, as issued for each soldier, appears to have been made up of 150 arrows.[52] Quivers for carrying them figure repeatedly in the lists of equipment, etc.[53] It is curious to note the care taken to record on delivery or inspection how many of the arrows or arrow-heads were in good order, and how many in some way defective.[54] The large proportion of the latter in some cases suggests that repairs were not easy to effect *in loco*.

Records of arrow-heads stored or issued.

Of other offensive arms we find a sword only twice mentioned, but in each case with the date and certain details of its make which M. Chavannes has been able to illustrate by a reference to a relievo sculpture of Han times.[55] Among the defensive arms named there are shields, of which two are described as having been made in Government factories in 63 and 61 B.C. respectively,[56] and two others as being old and damaged.[57] Of the three references to armour, *chia* 甲, two show clearly that it was made of leather, and the third, by the way in which its repair is ordered, clearly proves that scale armour in leather was meant.[58] My finds at the Niya Site of detached leather scales and in the Mīrān fort of lacquered scales still laced up have furnished illustrations of what this leather scale armour of Han times may have been like.[59] Finally, we see from two references to banners that this favourite appurtenance of Chinese military display was to be found even on the desolate desert border.[60]

Swords, shields, armour listed.

[48] Cf. *Third Journey of Exploration, Geogr. Journal*, xlviii. pp. 127 sq.

[49] Cf. above, pp. 599, 604, 640, 681, 704, etc.

[50] See below, pp. 767, 781, 790. See Pl. LIII also for broken arrow-shafts of reed and the iron tangs attached to arrow-heads. Of the latter we have specimens both with and without barbs.

[50a] I regret that I have not been able from want of time to follow up this detail of munition archaeology. But I believe that by careful weighing of the specimens and experimental use of cross-bows made up to the different standards some useful guide might be obtained.

[51] Thus we find 100 each entered in Nos. 126, 266, 587, 693; 300 in No. 125; 50 in No. 267, perhaps also in No. 41.

[52] No. 253 shows 150 *mêng* arrows issued to one soldier. In the inventory made out in No. 71 for four soldiers of the Yen-hu Company a total of 600 arrows is entered. According to No. 134 a certain soldier had 450 *mêng* arrows provided; but this may have been meant for three men, for there are two unread characters after his name, *Liu*.

Probably 150 arrows represented the maximum quantity of ammunition which could be conveniently carried by a fully equipped man; cf. the 120 rounds of small bore rifle ammunition carried by the British infantry soldier, increased to 200 rounds before action (*Infantry Training*, 1914, sec. 166).

[53] Cf. Nos. 41, 71, 187, 393, 591, 682.

[54] See Nos. 41, 71, 253, 682, 693, 703.

[55] Cf. *Doc*. Nos. 39, 40 with note. For the sword-point, T. VI. b. 001, see below, p. 769, and Pl. LIV.

[56] See *Doc*. Nos. 39, 40. The former records as the place of manufacture the town Nan-yang of Honan.

[57] See Nos. 75, 77; also the list of miscellaneous arms in No. 682.

[58] *Doc*. Nos. 393, 569 mention *ko chia*, 革甲 'leather armour'. In No. 187 an armour, saddle, and quiver are spoken of as torn, and immediate repairs enjoined by sewing and joining up.

[59] See above, pp. 246, 463 sqq., 477, 481 sqq.; also *Ancient Khotan*, i. pp. xvi, 411.

[60] Cf. Nos. 384, 393. The shafts are described as being of a particular sort of wood, probably specially strong and difficult to procure locally.

Stock statements, etc., kept of arms.

We owe the information above detailed mainly to the care which the administration obviously bestowed upon keeping exact record, by means of stock statements, inspection reports, and the like, of all arms whether furnished for particular watch-posts and detachments or issued to individual soldiers.[61] It is, no doubt, for the same reason that we also find among the inventories lists showing arms which had become damaged and useless.[62] These had evidently to be inspected, inventoried, and 'returned into store', as modern military routine of peace time would demand it, before they could in due course be replaced by fresh issues from some military magazine at head-quarters. The procedure here assumed on the basis of documents is very strikingly illustrated by a curious relic, broken arrow-shafts, one complete with its bronze head, T. XV. a. vi. 001 (Plate LIII), which I found neatly tied up into a little packet for 'delivery into store', and which has been already described.[63]

Lists of clothing issued to soldiers.

That the administration of the Limes also provided clothing for its soldiers is proved by a number of documents which mention tunics, vests, etc.[64] Linen is the prevailing material indicated, and this is abundantly represented among the rags recovered from the refuse-heaps of the Limes posts. Torn strips of silk, too, were plentifully found there, and the mention of an undress of white silk in the kit list of a soldier shows that they could not all have come from officers' cast-off clothes.[65] Shoes of leather and hemp are also mentioned in lists, and cast-off specimens of both were found in numbers at the ruined towers and stations.[66] My first inscribed 'find' on the Limes, T. III. i. 1, No. 674, was a wooden label for the clothes-bag belonging to a certain soldier, and the red canvas label, No. 434, bearing the name, etc., of a garrison soldier, was probably intended for the same purpose.

Hammers used for tent-pitching.

Among the few remaining miscellaneous articles of equipment of which mention can be traced in the records, the hammers referred to in No. 130, T. VI. b. i. 168, may be illustrated by the wooden implement, T. XIV. a. ii. 001, shown in Plate LII, and by the other from T. VI. c, described in my Personal Narrative.[67] The latter was undoubtedly, as its shape showed, meant for driving in tent-pegs. It thus furnishes interesting evidence of the fact that tents were also in use along the Limes. We should have had to assume this in any case, as the accommodation provided in the quarters traceable at the watch-towers would have been quite inadequate to

[61] In *Doc.* Nos. 257, 274 we thus have 'lists of arms belonging to Government entrusted to the soldiers on guard duty' at specific watch-stations (T. VI. b, XXII. b); see also Nos. 587, 591, 693. Issues to particular soldiers are recorded 'on loan' in Nos. 75, 77; see also Nos. 39–41, 71, 134, 253.

[62] No. 184 is a list of such arms in stock 'at the official residence of the [commandant of the] garrison soldiers'. No. 307, of A.D. 14, presents itself as 'a list of damaged objects among the military armament of Ta-chien-tu at Yü-mên', i.e., as I understand it, of objects which had been 'returned into store' as useless from that outlying post; cf. above, p. 689. See also No. 65.

[63] Cf. above, p. 704; below, p. 783.

[64] *Doc.* Nos. 42, 43 each record the issue in 60 B.C. of a linen tunic to a soldier by the captain of the Ling-hu company, with its price. No. 79 notes in possession of one man an under and an upper tunic, value 287 and 450 'cash pieces' respectively. No. 72, the kit list of a 'garrison soldier' from Shan-hsi, shows amongst other entries not clearly legible 'a black linen tunic, an undress costume of white silk, an unlined dress of black linen'. All these records are from T. VI. b. No. 351 is a list mentioning a spare vest and tunic of linen. No. 383 records the issue to a soldier of 'an unlined dress', and twenty of such are entered in No. 421, a fragment from the magazine T. XVIII.

[65] See note 64; for miscellaneous fabrics found in quarters and refuse-heaps, see below, pp. 768, 770, 773, 779, 785.

[66] See Nos. 351, 569; for specimens of shoes, see below, pp. 767, 769 sqq., 776, 780, 784, 786, and Pl. LIV.

[67] See *Desert Cathay*, ii. p. 152. This fine specimen of a hammer for tent-pitching was taken into use by my men, and rendered excellent service until the end of my journey I regret that, in my then crippled state, I was unable to prevent its being left behind at Leh and thus failing to reach the collection.

I am unable to find the reference to a tent quoted *ibid.* in the translated document No. 72, as now printed in M. Chavannes' work. The reference was taken from its manuscript, where the word 緹 *t'i*, may have been tentatively rendered in that way.

shelter the increased numbers of men likely to have been temporarily stationed there on occasions of alarms, etc.[68]

Records of medical treatment.

We have evidence in the documents that the same care which the administration took of the *matériel* was extended also to the health of the men keeping guard on the Limes. Thus we find reports on the illness of individual men,[69] and in Nos. 524–34 a collection of medical reports and prescriptions for individual cases, along with general recipes for diseases of men as well as animals. All these are neatly written on uniform slips of bamboo, and in all probability, as M. Chavannes explains, formed part of a kind of note-book kept by a physician practising on the Limes.[70] The systematic provision of medical aid of some sort for the border troops is conclusively proved by that very interesting relic, No. 588, T. VIII. 5 (Plate XVII). It is a wooden lid, about 7 by 3½ inches, bearing the clear inscription 'Medicine case of the Hsien-ming company', and still retaining remnants of the string by which it could be fastened to the case it once fitted. I have already mentioned the archaeological interest afforded by the seal-socket and string grooves of the lid.[71] They correspond exactly to the arrangements which I first observed in 1901 on the Kharoṣṭhī documents of the Niya Site, and definitely confirm their assumed Chinese origin.

References to punishments.

Considering the trying conditions of service on this desert border and the fact that a large proportion of the 'garrison soldiers', if not the majority, was made up of deported criminals,[72] the maintenance of effective discipline among the Limes troops must have been of special importance. We find references to this in several documents. Thus No. 188 + 199 tells us of a proposed sentence of capital punishment regarding which an application has been addressed to the throne.[73] In No. 68 we read of a soldier punished with 230 . . ., 'strokes' being obviously the word which is no longer legible in the slip. Perhaps No. 382 from T. XIV, with its report on the death of a man who had been beaten, relates to a case of such punishment. A beating stick intended for such use, T. XIV. iii. 0018, was actually recovered at the same site and, as Plate LII shows, in excellent preservation.[74]

Official correspondence and notifications.

From the many documents referred to in the preceding pages an adequate idea can be gathered as to the general character of the official correspondence which kept the clerical establishments on the border, those 'Babus' of Han times, busy, and which forms the bulk of the written remains recovered. It will suffice to add here brief mention of certain topics which recur with particular frequency among the *paperasses* left behind from the records of the small military offices. That all clerical devices of an elaborate system of military administration were familiar to these offices can be realized quite clearly by those, too, who, not being Sinologists, are unable to follow the many stereotyped phrases and terminological details elucidated by M. Chavannes. Very frequently the circulation of orders emanating from headquarters is prescribed among the different watch-posts of certain sections of the Limes and among the company stations.[75] Elsewhere the posting-up of certain orders in a visible and appropriate place is enjoined with particular emphasis, so that all concerned may take due notice.[76] A curious and, no doubt, much-needed general fulmination

[68] Of other implements we find mentioned axes in No. 257; a drinking-vessel in No. 384. For specimens of the latter in wood and lacquer, see Pl. LII and List below.

[69] Cf. Nos. 78, 161, 465; in the last case we are told that the sick man had gone to have himself treated by natives, but had died.

[70] Cf. *Documents*, pp. xvii, 113.

[71] Cf. above, p. 659.

[72] See M. Chavannes' note on *Doc.* No. 263, and above, p. 751.

[73] Did capital sentences of judicial routine stand then, as they did in modern times, in need of imperial confirmation before they could be executed?

[74] Cf. also above, p. 686. For other references to judicial action cf. Nos. 191, 494. The first mentions the escape of six prisoners. For the underground dungeon discovered at T. XIV, see above, p. 686.

[75] Cf. e.g. Nos. 166, 258, 273, 313, 536, 617.

[76] See Nos. 63, 432, 437; also No. 273.

is directed against those officers who receive gratifications for ignoring acts against regulations and neglecting the duties of their charges.[77]

Records of appointments, border incidents, etc.

Among official communications dealing with specific incidents we find some where officers are inculpated or accuse themselves of shortcomings.[78] But far more numerous are those where new appointments, returns to duty, and similar service orders are notified.[79] Official announcements in advance of 'inspections along the barrier', such as we find in certain documents, obviously deprived these inspections of any risk of causing awkward surprises.[80] Yet even thus we read of cases of unauthorized absence among the men when inspected.[81] In a few records we are afforded glimpses of attacks and alarms such as must more than once have disturbed the peaceful, if physically trying, police routine of the Tun-huang border.[82]

Calendar records from Limes.

With the official 'papers' may be suitably classed also the very numerous pieces containing portions of calendars, written on wooden slips and tablets of varying sizes and often fragmentary.[83] Such were obviously needed in order to enable the clerical establishments to date reports, etc., correctly, to make out accounts, and so on. Usually these portions of calendars show in order the cyclic designations, arranged according to the sixty years cycle, which a particular day bears in the successive twelve months of the year. This system has enabled M. Chavannes to fix in many cases the exact year intended, and in this way to restore complete calendars with absolute precision for the years 63, 59, 39 B.C., and A.D. 94, 153.[84] The result of his painstaking calculations affords valuable help for the verification of the tables prepared by Chinese chronologists. In this connexion

Erroneous *nien-hao* indicated.

it is of some interest to observe that an otherwise exactly dated document, No. 255, of May 10, 68 B.C., bears an erroneous *nien-hao*. The year is shown as the sixth of the *Pên-shih* period, which in reality had been replaced in 69 B.C. by the *Ti-chieh* period. This inaccuracy clearly points, as M. Chavannes observes, to the fact that the communications between the capital and the extreme western border were interrupted at the time.[85]

Private letters found on Limes.

By the side of the official communications and records, private letters figure in considerable numbers among the written remains from the Limes.[86] Most of them are too short or fragmentary to yield information bearing on the life of the border or to be otherwise of antiquarian interest. But special mention is due to two letters on silk, one long and well preserved, T. XIII. i. 003 (Plate XX),[87] which were found sewn up into a small bag for holding some medicine or condiment—luckily with the written surface turned inside. They were both addressed by an officer of superior rank stationed at Ch'êng-lo on the northern border of Shan-hsi to another exile on the Tun-huang Limes, the long one being intended to serve as a letter of recommendation for a colleague transferred to a post on the latter. Amidst much polite verbiage it also expresses the writer's disappointment at not having, after five years' service 'on the northern frontier, in a miserable country', attained the desired charge of a command, for which he appears to have repeatedly petitioned the Emperor. In two other letters also we find the writers lamenting the hardship of the guard service on the

[77] Cf. No. 404.

[78] See Nos. 171, 204, 536, 567.

[79] See, e.g., Nos. 137, 150, 155, 255, 493.

[80] Cf. Nos. 37, 51, 140. [81] See No. 536.

[82] See Nos. 172, 408, 548.

[83] Cf. *Doc.* Nos. 9–24, 25–35 for the series from T. VI. b, containing the calendars for 63 and 59 B.C.; also Nos. 36 (57 B.C.), 256, 260, 264, 429 (39 B.C.), 537 (A.D. 94), 538, 591, 595, 640, 680 (A.D. 153), 685, 697.

[84] Cf. *Documents*, pp. xvii, 14.

[85] Cf. *Documents*, p. 61. For similar cases of dates given in elapsed *nien-haos* see above, p. 408, and *Ancient Khotan*, i. p. 275, note. M. Chavannes' remarks, *ibid.*, pp. 533 sqq., make it quite certain that the erroneous *nien-haos* named in the Dandān-oilik documents of A.D. 781–7 were due to the isolation of Eastern Turkestān from the Empire through the Tibetan occupation of westernmost Kan-su in A.D. 781.

[86] See *Doc.* Nos. 151–4, 174, 178, 180, 243, 254, 344–6, 348, 349, 398, 398 a, 419, 468, 489, 501–2, 573, 607, 629, 706–7 (the last two on paper).

[87] See *Doc.* Nos. 398, 398 a (where the site-mark has been wrongly read as T. XIII. i. ii. 001. a).

frontier and the inclement season of spring.[88] The latter complaint bears a local touch which I can fully appreciate after my two spring campaigns of 1908 and 1914 on the desert border; it shows that the amenities of its climate were two thousand years ago much the same as now.

Silk envelope for letter.

Of interest for the study of the ancient stationery is the small silk envelope, No. 503, T. xv. a. ii. 4 (Plate XIV), used for a private letter, as its address shows. Its inside width is 65 mm. This would conveniently admit of the insertion of a letter on silk, such as No. 398 (Plate XX), which is 58 mm. wide, after folding. As the refuse-heap where the envelope was found contained documents with dates ranging from A.D. 15 to 56, it appears to me very probable that the envelope, too, belongs approximately to the first half of the first century A.D., and thus to the period preceding the invention of paper.[89]

Literary fragments.

It only remains for us to cast a glance at the fragments of literature, as M. Chavannes' analysis has revealed them, among the written relics of the Limes. Considering the conditions of the life led by those who guarded the line of small posts flung out into the desert, we cannot feel surprised at the scantiness of the traces which have survived of their intellectual occupations. For all that concerns the philological interest of these literary relics reference to M. Chavannes' full explanations will suffice here.[90] Of particular value among them are the relatively numerous fragments of a famous lexicographical text, the *Chi chiu chang* 急就章, which was composed in 48–33 B.C. and played an important part in the primary education of China during the Later Han period.[91] These fragments, as M. Chavannes duly emphasizes, are the oldest known manuscripts which exist of a Chinese book, and it is fortunate that we have among them one containing the first paragraph of the work complete. The long prismatic tablet which bears this portion of the text on its three faces, No. 1 (Plate I), also has a special antiquarian interest as being a perfectly preserved specimen of a type of wooden stationery which is referred to in early Chinese texts and apparently was favoured for literary use.[92]

Fragments of *Chi chiu chang*.

Abundance of writing exercises.

The popularity which *Chi chiu chang* soon acquired in the elementary teaching of Chinese writing sufficiently explains its rapid spread to the extreme north-west end of the border; for, among several ruined watch-posts, fragments of it were found also at T. VI. c (No. 4), a post early abandoned. In these, as in some other fragments which are of the usual slip form, the text appears to have been copied out as a writing exercise.[93] The importance which the Chinese have at all times attached to good handwriting is well known, and so also the necessity of constant practice which the very system of Chinese writing implies. This fact fully accounts not merely for the presence of these 'copy slips' from the *Chi chiu chang*, but for the abundant finds made also of other writing exercises.[94] Nothing could illustrate better the trouble which some of the men on duty at the outlying posts must have taken 'to improve their education', or at least their handwriting, than the big packets of 'shavings' inscribed in this fashion which came to light on clearing the refuse-heaps of T. VI. b, as already described.[95]

[88] See *Doc.* Nos. 344, 345.

[89] Cf. above, p. 672. But for this chronological evidence it might have been possible to assume, as M. Chavannes suggests, *Documents*, p. 110, that the letter was on paper and folded into a small roll, as was No. 904 (Pl. XXVIII) when found.

[90] Cf. *Documents*, pp. viii, xvi sq., pp. 1 sqq. on Nos. 1–8.

[91] Cf. Chavannes, *Documents*, pp. 1–3. It is from *Chi chiu chang* that the script, commonly known in China as *chang ts'ao* 章草 and illustrated by most of the Limes documents, takes its name; see Chavannes, *Documents*, p. viii.

[92] See *Documents*, pp. ix, 6 sq., note 1. M. Chavannes' note explains the term *ku* 觚, which occurs at the beginning of the first paragraph of the text and specially designates this type of tablet. We have fragments of prismatic triangular tablets in No. 2, T. xx. ii. 2 (Pl. II), also containing a passage from the text of the *Chi chiu chang*, and in No. 451, T. xv. a. iii. 31 (Pl. XII), which contains a brief congratulatory message.

[93] Cf. M. Chavannes' notes on *Doc.* Nos. 4, 6, 7.

[94] See, e.g., *Doc.* Nos. 251, 372, 422–3, 540, 632, 641, 643–4.

[95] Cf. above, p. 646.

Fragments of treatises, etc.

Apart from three more slips containing fragments of other vocabularies as yet unidentified,[96] the literary remains among the finds on the Limes are merely a few extracts from treatises on divination[97] and astrology,[98] and a fragment, No. 425, containing a passage from a treatise on military affairs, composed in 229 B.C.[99] That the solace of literature was not altogether absent from this desolate border-line may, perhaps, be concluded also from the fact that a fragmentary slip, No. 622, T. XXVIII. 10, quotes the title of the 'Biographies of eminent women', *Lieh nü chuan*, a book composed in 32–7 B.C.[100] There is a brief extract, too, from a medical treatise, together with a few fragments of a probably similar nature.[101] Finally, we may mention here the curious multiplication table, No. 702, T. XXVI. 1, though it does not come, of course, under the category of books.

Light thrown on ancient stationery.

It is in this connexion with books that one more point of antiquarian interest concerning the ancient stationery of bamboo or wood may here find convenient notice. We have had above many occasions to discuss various striking illustrations and additions which our knowledge of that early Chinese stationery, as first based on the evidence of my finds of 1901 at the Niya Site, has received from the documents yielded by the ruins of the Tun-huang Limes and, to a smaller extent, of the Lou-lan station.[102] The presence among the finds on the Limes of remains of books and writings which from a quasi-technical point of view, i.e. from that of the bookbinder, to use a modern expression, may claim the same character, now enables us to clear up the question, previously very obscure, how proper cohesion and sequence could be assured for the numerous slips or tablets over which texts of any size written on bamboo or wood must necessarily have extended. M. Chavannes, who in a masterly discussion had previously reviewed the information that can be gathered from Chinese textual sources about the ancient writing-materials used before the invention of paper,[103] did not fail to observe, when handling my new finds, that a number among the narrow tablets or 'slips' bore one or more notches on one of the edges. As the position of these was uniform on those 'slips' which manifestly belonged to one series, M. Chavannes rightly concluded that the notches were intended to serve the purpose of uniting such slips into one group.[104] But he added: 'Nous ne comprenons pas bien encore comment on assurait l'ordre de succession de ces fiches; il n'y a aucune numérotation pouvant tenir lieu de pagination, et on ne comprend pas comment il était possible de rétablir l'ordre lorsque quelque cause accidentelle l'avait bouleversé.'

Wooden 'slips': how arranged into books.

Notched edges of wooden slips.

The question thus raised is a very pertinent one, and makes it desirable to examine the materials available for its eventual solution. They are briefly the following: In the set of slips Nos. 9–24, belonging to a calendar of A.D. 63, we find the left edge of each provided with three notches, disposed, as Plate I shows, at exactly uniform distances. Another set of slips, Nos. 25–35 (Plate II), forming part of the calendar for 59 B.C., shows two notches, also uniformly placed, but on the right edge of each slip. A third method of arrangement is found in the set of narrow bamboo slips, Nos. 524–34,[105] making up the medical note-book above mentioned: here we find two notches

[96] See Nos. 397, 603 (?), 701.

[97] Cf. Nos. 59, 448, 638, with M. Chavannes' remarks, p. xvi.

[98] See No. 182, where the notch proves the slip to have formed part of a book.

[99] I owe this last reference to M. Chavannes, who was kind enough on Oct. 3, 1917, verbally to indicate the identification made by Mr. Wang Kuo-wei in his *Liu sha to chien*, reproducing a portion of the documents first published by M. Chavannes. The treatise was apparently known as *Li-mo* 力墨.

[100] See *Documents*, pp. xvii, 137. Two records of A.D. 75, Nos. 613, 614, prove that the watch-tower T. XXVIII was occupied towards the end of the first century A.D.

[101] See *Doc.* No. 395, a complete slip, with the fragments Nos. 396, 397.

[102] Cf. above, pp. 382, 659, on the use of seal sockets and string grooves; p. 382, on sealed lids closing small boxes intended to hold communications extending over several 'slips'; pp. 382, 597, on the standard size of slips.

[103] Cf. M. Chavannes, *Les livres chinois avant l'invention du papier*, *J. Asiat.*, janvier–février 1905 (reprint), pp. 13–47, for texts written on bamboo or wood.

[104] Cf. *Documents*, p. viii.

[105] See Pl. XIV for specimens.

on the right, one above, one below, and a third always placed on the left in the middle. Among single slips provided with notches only one, No. 182, needs special mention here, as its text supports the conclusion, suggested by the single notch on the right, that it belonged to a book.[106] It is worthy of particular note that none of these slips bear any writing on the reverse, except those of the calendar of 59 B.C., where we find a system of consecutive numbering by means of cyclic characters.

Reverses of notched slips uninscribed.

Attention is claimed by the fact that no text is to be found on the reverse of any of the notched slips belonging to sets.[107] It appeared *a priori* all the more significant in view of the inconvenience which the bulk and weight of books written on slips of bamboo or wood must in any case have caused. It necessarily raised a presumption that the fastening, for which the notches were undoubtedly intended, must have been arranged in a way which brought the blank reverses of consecutive slips back to back and thus made it inconvenient to use the reverse surfaces for inscribing or reading any portions of the text. This conjectured arrangement recalled to my mind that of numerous Chinese and Tibetan manuscripts brought back from the 'Thousand Buddhas' of Tun-huang, which are long sheets of paper consisting of several joined pieces and folded up into narrow pages somewhat after the fashion of a concertina. In these manuscripts, too, the reverse surface of the paper is always left uninscribed, just as we find it regularly in Chinese printed books, in which, as a matter of fact, we merely have an adaptation to block-printing of the 'concertina' method just alluded to.

Conjectured 'concertina' arrangement.

At this point I appealed to Mr. Andrews' often-proved technical ingenuity, and the note and diagrams from his hand, shown on p. 766, furnish what seems to me a very likely solution of the puzzle.

Habent sua fata libelli. It seems strange that we should have to look among the relics from lonely desert posts of the border-line pushed out far towards the barbarian west for evidence to clear up details, even if they are only technical, concerning the books in which that glory of Chinese civilization, its ancient literature, found its earliest written record. What this literature has to offer in return in the shape of historical notices bearing on the Tun-huang Limes has already been examined at the beginning of this chapter. All that remains now is to call attention to the vivid and often touching glimpses which Chinese poetry has retained of the feelings of the exiles whom imperial command had dragged away from their homes and set to guard this and other far-flung stretches of the Great Wall.

Hardships of border service reflected in Chinese poetry.

The specimens of Chinese poems on this theme of forced military border service which M. Chavannes has translated at the end of his *Introduction*[108] belong mostly to the T'ang period. But they faithfully reflect the deep impression left behind by the sufferings and sacrifices which attended the extension of the Great Wall and the subsequent bold enterprises of Han times in inhospitable Mongolian and Central-Asian regions, far away to the Pāmīrs and beyond them. Those poems form thus a valuable supplement to the contemporary remains and records brought to light by my explorations along the Wall itself. It would serve no useful purpose were I to attempt to offer here second-hand extracts from these poetic yet convincingly true *documents humains* which M. Chavannes has rendered with the pen of a master. But I feel that I cannot close my account of the results which the exploration of the Tun-huang Limes has yielded more fitly than by quoting M. Chavannes' eloquent lines on the human background of this notable chapter in Chinese history: 'L'historien qui retrouve les traces de la politique hardie des Han dans l'Asie centrale ne doit pas

[106] There are besides: Nos. 264, 306, both fragments of calendar slips, displaying one notch on the right in the extant top portion; No. 478, containing only a signature, with one notch on the top to the right. Nos. 519, 610, with three notches and one respectively on the right, remain undeciphered and hence must be left aside for the present.

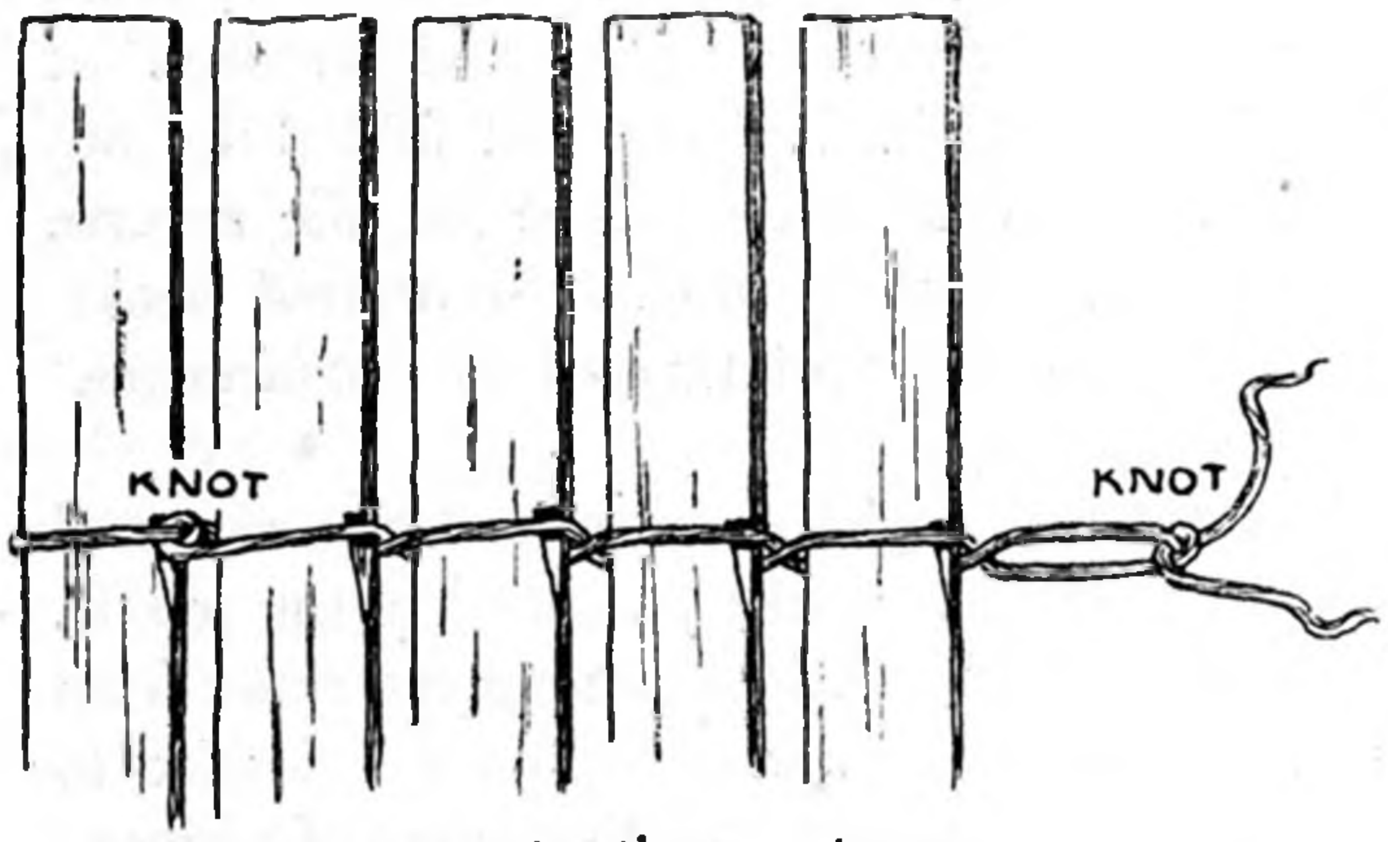
[107] The same fact is clearly established by the evidence of Chinese literary records; cf. Chavannes, *Les livres chinois*, *J. Asiat.*, janvier–février 1905 (reprint), pp. 35 sqq.

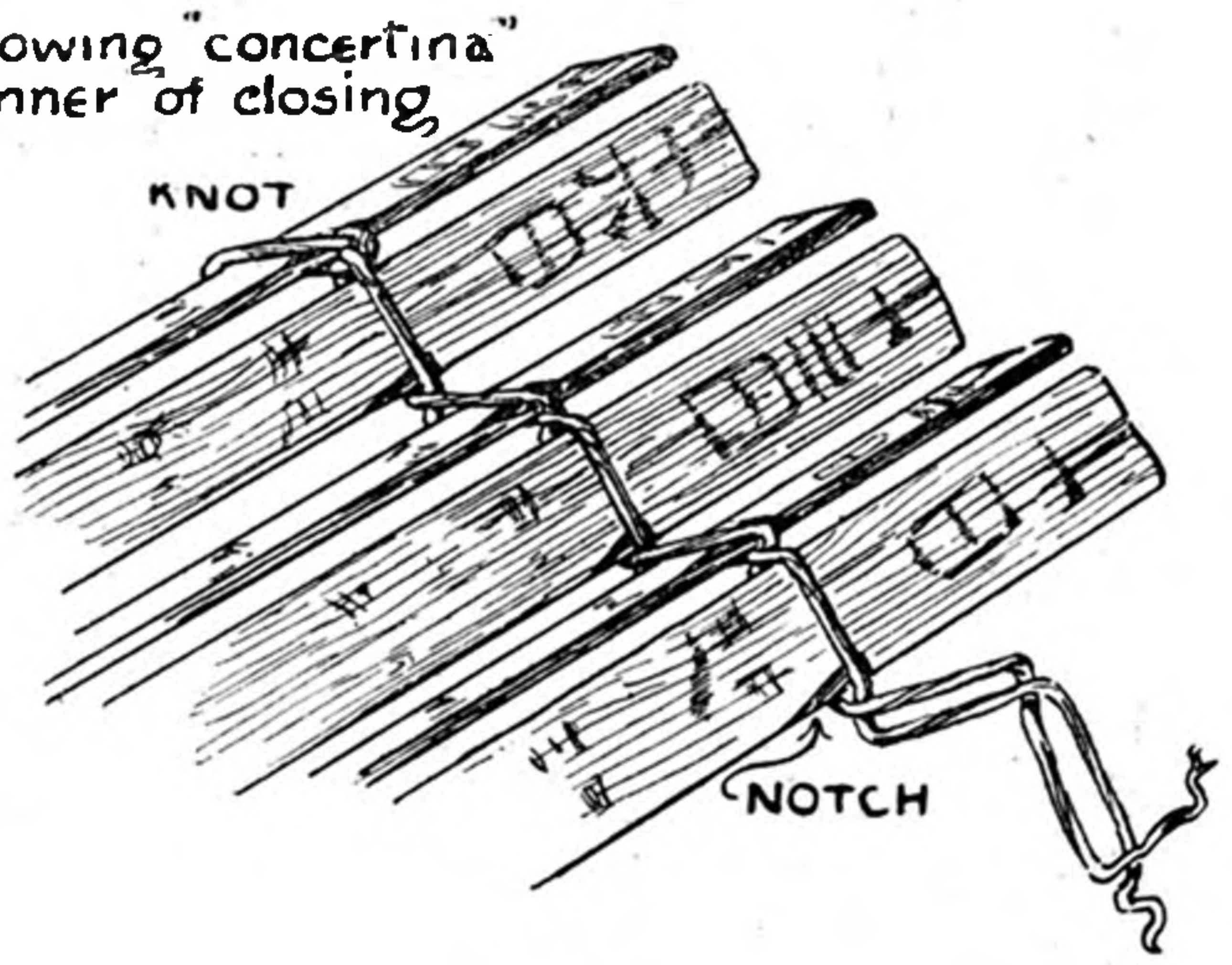
[108] Cf. *Documents*, pp. xvii–xxiii.

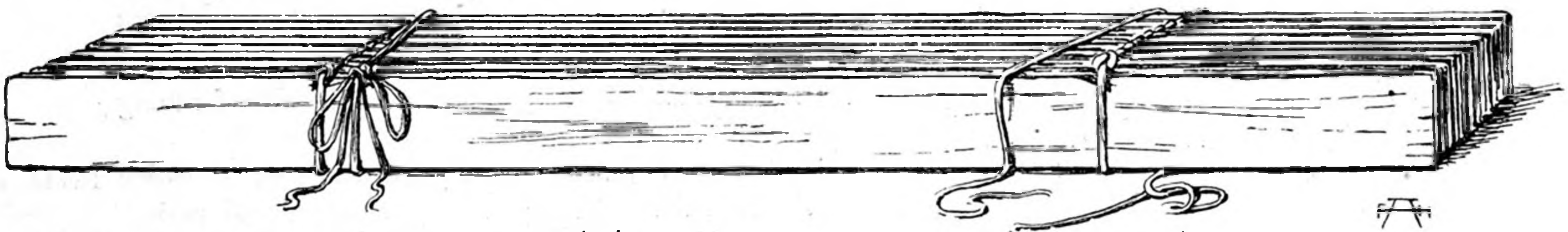
oublier que toute cette grandeur fut édifiée avec des matériaux humains. De même que les poètes chinois croient encore entendre errer le long de la grande muraille de *Ts'in Che houang ti* les âmes désolées de ceux qui la construisirent, ainsi nous évoquons, sous les détails administratifs de la vie d'une petite garnison chinoise perdue en plein désert, les souffrances et les regrets des exilés qui se lamentent.'

NOTE OF MR. ANDREWS ON 'SLIPS' ARRANGED INTO BOOKS

Each 'slip', i.e. small lath of wood (belonging to a series which contained one text or connected record), being a folio, it is clear that some means of binding must have been employed to maintain the folios in correct collation. The small notches observed on the edges of the 'slips', and the fact that these exactly range when a number of 'slips' are collated, indicate that the connecting binding must have been of the nature of a string, an inference strengthened by the references in Chinese texts to silk or leather cords uniting the fascicles of wooden or bamboo slips (cf. Chavannes, *Les livres chinois*, pp. 43 sqq.).







Experimenting with a fine raw silk thread, I found that a satisfactory result could be attained by the following method (see illustration above). The cord is doubled end to end, the first 'slip' (folio one) is placed in the bend, and an ordinary knot tied with the two ends, care being taken that the encircling cord falls in the notch near one end of the lath, the purpose of which is to prevent the cord slipping. Folio two is then laid with its notch close to the knot, one end of the cord being below the lath and the other on the top. The two ends are then half twisted round each other reversing the positions of the cords, the upper becoming the lower and the lower the upper. Folio three is next placed between the cords with its notch against the half twist, and the cords are again half twisted to secure it in position. The process is continued until the last folio, after which a knot is tied, and the excess length of the two ends is left free to be used as a means of tying the complete record or chapter together, when it has been closed in concertina fashion. The same procedure is followed with the opposite end. The whole process is practically that followed by basket-makers and 'chick'-makers, sometimes described as 'wrap twining' or 'pairing', and will be perhaps more clearly understood from the accompanying sketch.

The reason for tying the first knot is to prevent the cord travelling round with frequent opening and closing of the book, a tendency which it had, as experiment proved. When closed, the fascicle could be conveniently slipped into a rectangular case for protection. For lids of such cases, with string grooves and seal cavity, see *Ancient Khotan*, Pl. CXIV (N. xv. 345), and *Documents*, Pl. XXIII (No. 751, L.A. vi. ii. 0200).

Section VII.—LIST OF ANTIQUES FROM RUINS OF TUN-HUANG LIMES

OBJECTS FOUND, OR EXCAVATED, IN DIFFERENT LOCALITIES ALONG LIMES

*T. 002. **Wooden peg**, resembling tent-peg; section flattened triangular, tapering to point below. Near top, on sides of obtuse angle, a human face roughly drawn in black ink; a notch in the angle indicates root of nose, larger notch the nostrils and mouth, wherein teeth are drawn (only mouth notch in T. xii. a. i. 001; xv. a. iii. 007; no notches in T. vi. b. i. 004); long beard. These pegs have been driven into the ground, but show no other signs of wear. Other examples: T. vi. b. i. 001–004; xii. a. i. 001; xiv. iii. 58; xv. a. iii. 007; xviii. i. 001; xxvii. 0010. $9\frac{7}{8}'' \times 1\frac{1}{4}'' \times \frac{1}{2}''$.

T. 004. **Fr. of bronze mirror** with orn. in relief; Chinese style with perhaps Western influence (?); a phoenix (?) in flight, its tail arranged in floral-like scrolls; very delicate work. The casting is a thin shell backed with sheet bronze and filled up with lead; bronze much perished by burning, much of lead melted out. Fr. comprises pierced central boss and about one-tenth of circumference. Gr. M. $3\frac{3}{8}''$. Pl. LIII.

T. 006. **Bronze sheet**, bent roughly into rude cylinder; much corroded and broken. $5\frac{3}{4}'' \times c.\ 3''$.

*T. 007. **Bronze arrow-head** like C. 123. 001; blade triangular in section, each face slightly leaf-shaped; hexagonal shank, socketed, with remains of iron tang; no depression in sides; cf. L.A. 0017 and *Ancient Khotan*, ii. Pl. LXXIV, N. 005. a. Length $1\frac{3}{16}''$. For other examples see: T. 009; ii. 001. a–b; iv. b. 001; xii. 0020; xii. a. i. 005; xiii. 006–007; xiv. a. 007; xv. 008; xviii. iii. 004; xxviii. 009–0010.

T. 008. **Bronze bar**, broken at each end. Length $1\frac{9}{16}''$, diam. $\frac{5}{16}''$.

T. 009. **Bronze arrow-head**; cf. T. 007; hollow in one side, blunted. Length $1\frac{1}{8}''$.

T. 0010. **Frs. of some dried leaf.**

T. 0011. **Tapering strip of 'green' leather**; two holes near narrow end through which a stick once passed. $2\frac{3}{4}'' \times 1\frac{1}{8}''$ to $\frac{1}{2}''$.

T. 0014. **Uppers of stout hemp or cotton (?) fabric shoe,** like T. vi. b. i. 009, but without drawing string. Opening permanently sewn up at toe end, causing projecting toe point referred to in case of above; three layers of fabric, all hemp, the middle being apparently 'waterproofed' on its outer surface with a wax paint. Much perished. Length $10\frac{1}{4}''$, gr. width $4\frac{1}{4}''$.

T. 0015. **Fr. of bronze mirror.** On back raised flat rim; then two lines in low relief having relief patterns between them (an oval and a horseshoe with a dot); inside, again, a band in low relief. Gr. M. $1\frac{7}{16}''$.

T. 0016. **Pottery fr.,** hand-made, of fairly well levigated grey-burning clay, lightly burned, apparently 'smothered' in an open hearth; 'mat-marking' on the outside. See T. iii. 004; xii. 3. Gr. M. $1\frac{7}{8}''$.

T. 0018. **Part of trap** like T. xv. a. i. 009; ring broken and in part missing; core made of pliable twigs. Nine teeth only remain; hemp string $5''$ long tied round one. Diam. of ring, outside $6\frac{1}{2}''$, inside $5''$, length of teeth $2''$ to $2\frac{1}{2}''$.

T. 0022. **Pottery fr.,** wheel-made, of ill-levigated grey-burning clay, kiln-fired, with 'mat-marking' on outer face; as T. iii. 004. Found W. of C. 172, 17. iv. 07. Gr. M. $1\frac{5}{8}''$.

T. 0023. **Fr. of iron horseshoe**; much corroded; two oblong nail holes. Found at hut near C. 171, 16. iv. 07. Gr. M. $2\frac{3}{4}''$.

T. 0024. **Pottery fr.** from rim of bowl; buff clay with lustrous mottled green and brown glaze on both sides. Found at hut near C. 171, 16. iv. 07. Gr. M. $1\frac{3}{4}''$.

T. 0025. **Fr. of porcelain** from rim of bowl; white body painted in bright blue under greyish-white glaze; prob. floral pattern. Cf. T. xi. 002, etc. Found at hut near C. 171, 16. iv. 07. Gr. M. $1\frac{1}{16}''$.

T. 0026. **Fr. of slag**; apparently from glaze-making, mixed with frs. of quartz. Found 21. ix. 07 at tower near Hsi-êrh-tun (?). $3\frac{3}{4}'' \times 2''$.

T. 0027. **Fr. of porcelain bowl** with everted rim; white body, painted in dull blue under a greyish-white glaze with rough floral design on outside; inside, border of dots above double line round rim; rosette (?) on base. Similar pattern and ware to T. xi. 0010. Found 21. ix. 07 at tower near Hsi-êrh-tun (?). Gr. M. $2\frac{1}{4}''$.

T. 0028. **Fr. of stoneware** from near base of bowl; body of light drab clay with lustrous brown-black glaze on both sides over upper part; cf. T. xxvii. 5; xxix. 4. Found 27. ix. 07 at tower near Hsi-êrh-tun. Gr. M. $2\frac{3}{4}''$.

OBJECTS FOUND, OR EXCAVATED, NEAR WATCH-STATIONS ON SOUTH-WESTERN FLANK OF LIMES

T. W. 001. **Fr. of pottery,** wheel-made, of grey-burning clay, kiln-fired; mat-marking on outside. $1\frac{3}{4}'' \times \frac{1}{2}'' \times \frac{1}{4}''$.

T. W. 002. **Fr. of coarse light drab stoneware,** covered on both sides with brilliant brown-black glaze. Roughly potted. Gr. M. $2\frac{1}{4}''$, orig. diam. $3\frac{1}{2}''$.

T. W. 003. **Fr. of pottery,** thick, wheel-made, of very well-levigated light slaty grey-burning clay, kiln-fired; the exterior 'smothered' black and covered with 'mat-marking'. Gr. M. $2\frac{1}{8}''$.

T. W. 004. **Rough straight twig** with cord looped

along it. Each time that end of cord passes over stick, it is brought back through previous loop, so that loops themselves are intertwined. Broken at each end. Prob. to take ends of cords in making rush mats or in netting. Stick $5\frac{3}{4}'' \times \frac{1}{4}''$ diam., rope $\frac{1}{8}''$ to $\frac{3}{16}''$ diam. Pl. LIV.

T. W. 005. Iron skewer with ring-handle, as T. XII. a. 0026. Pin flat as T. W. 007; edge much corroded. Length $4\frac{15}{16}''$, width of pin *c.* $\frac{1}{4}''$.

T. W. 006. Iron rod; broken both ends, sq. in section, much corroded. $4\frac{1}{8}'' \times \frac{3}{16}''$ sq.

T. W. 007. Iron skewer with ring handle, as T. XII. a. 0026. Pin broad and flat like knife blade, handle round in section. Length $3\frac{7}{8}''$, gr. width of pin $\frac{3}{8}''$. Pl. LIV.

T. W. 008. Fr. of string shoe-sole; string coiled flat and sewn together by transverse thread. $4'' \times \frac{7}{8}''$.

T. W. 009. Piece of eroded white stone, worn into ridges by action of wind and sand. Gr. M. $1\frac{7}{8}''$.

OBJECTS FOUND AT WATCH-TOWER T. II

T. II. 001. a–d. Misc. bronze and iron frs.

(*a*) Bronze arrow-head, type of T. 007; sides plain, well preserved. Length $1\frac{1}{4}''$.

(*b*) Iron arrow-head, type of T. 007; with tang, made in one; sides plain; corroded. Length $1\frac{1}{2}''$.

(*c*) Thin iron rod, corroded. Length 2″, diam. $\frac{1}{16}''$.

(*d*) Head of iron instrument for extracting nails, as at back of modern hammer; a curved two-prong fork, prongs high and narrow, meeting at sharp angle; corroded. Length 1″, width $\frac{3}{8}''$.

OBJECTS EXCAVATED AT WATCH-TOWER T. III

T. III. 001. Wooden seal-case, type C; see T. VIII. 5. V-shaped groove $\frac{1}{16}''$ wide $\times \frac{1}{8}''$ deep, cut lengthways in tops of ends; stained red. $1\frac{3}{8}'' \times \frac{5}{8}'' \times \frac{3}{16}''$.

T. III. 002. Fr. of matting (?) made of string of coarse brown fibre. The strings, coming alternately from left and right, are passed round a cord at right angles to their direction, and the two ends of each are then twisted together; cf. T. XXVII. 0023. Ragged. *c.* $5\frac{1}{2}'' \times 2''$.

T. III. 003. Reed straw specimen, from fascines of Limes wall.

T. III. 004. Pottery fr., wheel-made, of grey-burning red clay, fairly well levigated, fired on an open hearth and 'smothered'; on grey-black outer face 'mat-marking'. Other examples: T. 0016, 0022; XII. 1–3. Gr. M. $2\frac{1}{2}''$.

OBJECTS EXCAVATED AT FOOT OF LIMES WALL, E. OF T. III

T. III. i. 001. a. Fr. of iron reaping-hook; back slightly curved, with inner cutting edge. Found 8. iii. 07. $4\frac{1}{2}'' \times 1''$ to $\frac{11}{16}'' \times \frac{1}{8}''$.

T. III. i. 001. b. Fabric frs., found 8. iii. 07 embedded in Limes wall N. of T. III, include: 1 fr. buff silk, fine, plain; 2 frs. green silk, plain; 1 fr. olive green silk, plain; 1 fr. buff hemp fabric; 1 fr. string braid tied round curved stick; and handful of raw silk. Gr. length (hemp fabric) $10\frac{1}{2}''$.

T. III. i. 002. Wrought iron chisel with short cutting edge; broken at other end. Throughout, it narrows to one side, along which runs a slight and irregular flange. Found 8. iii. 07. $2\frac{1}{4}'' \times \frac{5}{8}'' \times \frac{3}{16}''$ to $\frac{3}{32}''$.

T. III. i. 003–004. Two frs. of iron rods, bent; sq. in section; prob. shafts of cross-bow arrows. Found 8. iii. 07. Length $4\frac{3}{4}''$ and 3″, width $\frac{3}{16}''$ sq.

T. III. i. 005. End of wooden bar with oblong hole ($1\frac{1}{8}'' \times \frac{5}{8}''$) stopped with rag of buff canvas; wood rotten. $5'' \times 2'' \times \frac{5}{8}''$.

OBJECTS FOUND ON SURFACE AT WATCH-TOWER T. IV. A

T. IV. a. 001. Bronze bossed button; behind, two hoops for attachment; one broken, condition otherwise good; cf. N. XXXV. 004. Found by Rai Rām Singh, 16. iv. 07. Diam. $\frac{3}{4}''$.

T. IV. a. 002. a–c. Misc. iron frs.: *a.* Disc-headed iron nail, stem sq. in section. Length $1\frac{1}{2}''$, diam. of head $\frac{5}{8}''$. *b.* Curved iron staple (?). Diam. $\frac{1}{8}''$. *c.* Rectang. iron staple (?). Diam. $\frac{1}{8}''$. Found by Rai Rām Singh, 16. iv. 07.

OBJECTS EXCAVATED AT WATCH-TOWER T. IV. B

T. IV. b. 001. Bronze arrow-head, type T. 007; sides plain, remains of iron tang; condition good. Length $1\frac{1}{16}''$.

T. IV. b. 002. Fabric frs., including one fr. of buff hemp (?) fabric, ten frs. of plain buff silk, and one fr. each of dark brown, greenish blue, and bright red; all ragged. Gr. length (buff silk) 1′ 2″

T. IV. b. i. 001. Wooden seal-case, type C; see T. VIII. 5. $1\frac{5}{8}'' \times \frac{7}{8}'' \times \frac{9}{16}''$.

T. IV. c. 002. Fr. of buff woollen (?) fabric, coarse, plain weave. $2'' \times 1\frac{1}{2}''$.

T. IV. c. 003. Fr. of tanned leather (goatskin ?), from an edge of which hair has not been completely removed. $2'' \times 1''$.

MISCELLANEOUS SPECIMENS COLLECTED BY RAI RĀM SINGH AT T. IV–VI

T. IV–VI. 001. Pottery fr., wheel-made, of ill-levigated grey-burning clay; kiln-fired; 'mat-marking' on outer surface; cf. T. III. 004. Found 20. iv. 07. Gr. M. $1\frac{5}{8}''$.

T. IV–VI. 002. Pottery fr., wheel-made, of well-levigated grey-burning clay, kiln-fired and 'smothered'. Found 17. iv. 07. Length $2''$.

T. IV–VI. 003. a–c. Misc. iron frs., corroded; *a–b*, rods; *c*, head of skewer, as T. XII. a. 0026. Found 20. iv. 07. Gr. M. $2''$.

T. IV–VI. 004. Fr. of plate bronze with marks of two pin holes. Found 20. iv. 07. $\frac{3}{4}'' \times \frac{7}{16}''$.

OBJECTS EXCAVATED AT T. V

T. V. 001–002. Two wooden brackets generally resembling T. VIII. 004, q.v. for full description. Sides orn. with incised lines which follow the outline, the innermost turning into spiral at end; these alternately painted black and left uncoloured; low ridged collar separates head from tenon; through tenon of 002 is mortice $1\frac{3}{8}'' \times \frac{11}{16}''$. Length $3\frac{1}{4}''$ (with tenon $6\frac{3}{4}''$), h. $1\frac{1}{2}''$ and $1\frac{7}{8}''$, thickness $\frac{7}{8}''$ and $1''$. Pl. LIV.

T. V. 003–004. Two heads of wooden brackets, same type as T. V. 001–002; see T. VIII. 004. Incised lines painted black alternately, surface red (faded); tenons broken off. *003*, $3\frac{1}{2} \times 1\frac{1}{2}''$ (max.) $\times \frac{3}{4}''$; *004*, $3'' \times 1\frac{1}{4}''$ (max.) $\times \frac{11}{16}''$.

T. V. 005. Sq. patch of leather, outside coloured black. $3'' \times 2\frac{1}{2}''$.

T. V. 006. Fr. of plain linen or cotton fabric; regular weave. Gr. M. $4\frac{1}{4}''$.

OBJECTS EXCAVATED IN QUARTERS OF STATION T. VI. B

T. VI. b. 001. Point end of iron sword-blade; straight, two-edged, thickening to fairly well defined central rib; corroded. $9\frac{1}{2}'' \times 1'' \times \frac{1}{4}''$. Pl. LIV.

T. VI. b. 002. Wooden spatula with flat oblong bowl. Length $5\frac{5}{8}''$, width of bowl $1\frac{3}{8}''$.

T. VI. b. 003. Wedge-shaped wooden block painted black: suspension loop of string at thick end, held in hole by a plug of wood wrapped in soft leather; no inscription visible. Well preserved. Cf. T. VI. c. iii. 001 and T. VIII. 1. $10\frac{3}{4}'' \times 3\frac{5}{8}'' \times 2''$ to $\frac{3}{8}''$. Pl. LII.

T. VI. b. 004. a–b. Two wooden posts or bars of uncertain use. Oblong in section, curved towards one end; straight portion has split lengthways down middle of narrow sides, the longitudinal halves meeting for $3''$ at straight end, but being cut away for remainder of length to leave long opening $\frac{5}{8}''$ wide; this aperture shows remains of leather lining. Where sides meet at straight end the inner edges are bevelled down to meet the slit; at other end a rabbet is cut out on inner side of curve. *a* inscr. with Chin. chars. (illegible); *b* has been stained black all over, but colour now mostly gone. $2' \times 2\frac{1}{2}'' \times 1\frac{3}{4}''$. Pl. LII.

OBJECTS EXCAVATED AMONG REFUSE-HEAPS OF T. VI. B

T. VI. b. i. 001–004. Four wooden pegs, with top roughly cut and painted in likeness of human head. See *T. 002. T. VI. b. i. 002 has been trimmed on head; 003 has point bent, but is otherwise unworn; 004 has no notches, but nose is indicated by line on each side of ridge; no teeth or eyebrows are marked, and beard hangs straight from mouth as there is no chin line; point broken. Largest peg (003) $9'' \times 1\frac{5}{8}'' \times \frac{3}{4}''$. *002, 003, 004*, Pl. LII.

T. VI. b. i. 005. Half of wooden comb, with arched back as L.A. VI. ii. 0014. H. $3''$, width (broken) $\frac{11}{16}''$, 13 teeth to $\frac{1}{2}''$.

T. VI. b. i. 006. Wooden seal-case, type C; see T. VIII. 5. Two holes through bottom. $1\frac{7}{8}'' \times \frac{3}{4}'' \times \frac{1}{2}''$.

T. VI. b. i. 007. Wooden block, having along one of its narrow edges ten holes $\frac{3}{8}''$ in diam. $\times \frac{3}{8}''$ deep, one showing remains of peg. In centre, one transverse hole of similar dimensions has peg complete, but not projecting either way. All pegs were wedged in with felt. $6'' \times 1\frac{1}{8}'' \times \frac{11}{16}''$.

T. VI. b. i. 008. Fr. of lacquered wooden tray (rim); wood warped against grain into curve; lacquered black outside, red inside; bad condition. $2'' \times 1\frac{7}{8}'' \times 1\frac{1}{10}''$.

T. VI. b. i. 009. Shoe of stout buff hemp (or cotton ?) fabric, strengthened with hemp string. Sole, thick and matted with earth, has warp of thick hemp cord placed lengthways, with weft of string plaited in the 'wrapped-twined' manner. The under surface is covered with evenly disposed tight knots of string, woven into the fabric as the pile knots are woven into a carpet; these would have the effect of climbing nails in a modern boot, and would strengthen the shoe's wearing qualities. The uppers are of two or more thicknesses of strong plain cotton or linen canvas, bound together by even rows of 'run' hemp string, which give a spot pattern over the surface. A drawing string is threaded round near the upper edge, which by a clever method of crossing near the instep restricts the size of the opening, and draws up the slack of the fabric over the toes into a sort of point; it is possible that the

origin of the curled-up toe of the modern Turkish and Indian shoe is similar. Sole and uppers are joined by strong over-sewing. Hole worn in heel and ball of toes; much sand-encrusted. Length $10''$, gr. width $5''$.

T. vi. b. i. 0010. Strip of buff felt, faced with two pieces of coarse woollen fabric, one faded purple, the other blue-green; fabric sewn down by close-set rows of running threads. Prob. from upper of shoe. $7\frac{3}{4}'' \times 2\frac{3}{8}''$.

T. vi. b. i. 0011. Woven string shoe, hemp. Sole has transverse thick warp on which the weft is woven in successive elliptical rings; the uppers are 'wrapped-twined', the pairs of threads being white and buff and the result a twill pattern. Uppers of toes woven separately of finer thread, and afterwards joined to the sides; consequently no projecting toe point. Much worn. Length $10''$, gr. width $3\frac{1}{2}''$.

T. vi. b. i. 0012. Fabric frs., silk, plain weave; including one fr. of buff silk patchwork, one strip of crimson silk irregularly dyed, three frs. of coarser reddish-yellow silk sewn to frs. of buff or greenish-blue silk, and misc. small scraps buff and brown; much torn and perished. Gr. M. (buff patchwork) *c.* $10''$. [Analysed by Dr. Hanausek.]

T. vi. b. i. 0013. Misc. leather and fabric frs. including: two frs. of soft buff leather (lambskin?) sewn together; one strip of yellow felt, doubled and sewn with red thread; one fr. of coarse loose yellow goat's hair (?) fabric; bag, or toe of shoe-lining ($6\frac{1}{2}'' \times 4''$) of coarse buff hemp (?) fabric; and strip of plain close-woven buff fabric of which Dr. T. H. Hanausek says: 'Both [specimen] threads of bast-fibre of a species of the Moraceae, most probably of *Broussonetia papyrifera*, L., Vent.: paper mulberry-tree, of China and Japan.' Cf. for similar material, T. xvii. 006. Gr. M. (buff fabric) $12\frac{3}{4}''$.

T. vi. b. i. 0014. Ninety-eight wooden writing slips, uninscribed; mostly unbroken. Average length $9''$, width $\frac{3}{8}''$ to $\frac{5}{8}$, thickness $\frac{1}{16}''$ to $\frac{1}{8}''$.

T. vi. b. ii. 001. Small ovoid wooden bowl, lacquered inside deep red-brown, and outside black. On one of the long sides near brim is a projecting solid ear, which served as handle; the opposite side, much broken, shows an ancient repair by string. Round inside of brim is a painted border in simple black lines, and one thin yellow line; outside shows traces of well-executed scroll pattern in red on black ground. Length $5''$, width $3\frac{1}{2}''$, height $1\frac{3}{4}''$ Pl. LII.

T. vi. b. iii. 001. Wooden bracket; see T. viii. 004. Short tenon for fixing into wood; tenon and bracket proper separated by double bevelled collar; bracket oblong in section with three grooves below and three along each side; the sides curve up to form usual spiral end, but this is broken away. Traces of paint. $7\frac{3}{8}''$ (tenon $1\frac{1}{2}''$) $\times 2'' \times 1\frac{1}{4}''$. Pl. LIV.

T. vi. b. iii. 002. Wooden peg with knob at end; carefully cut. Length $4\frac{1}{2}''$, diam. $\frac{5}{16}''$, knob $\frac{1}{2}'' \times \frac{9}{16}''$ (extra).

T. vi. b. iv. 001. Fr. of rectang. wooden board, broken lengthwise; rude design in faded ink, perhaps part of human mouth and nose; cf. T. xxviii. 35. $4\frac{7}{16}'' \times 1\frac{3}{4}'' \times \frac{1}{4}''$.

T. vi. b. iv. 002. Fr. of thin rectang. wooden board apparently sq.; near centre, hole *c.* $\frac{3}{16}''$ diam.; only one side smoothed; round edge of this, marks of frame (?); on face, traces of characters (?) in ink. $4\frac{1}{2}'' \times 3\frac{7}{8}''$ (broken) $\times \frac{3}{8}''$.

OBJECTS EXCAVATED IN QUARTERS OF STATION T. vi. c

T. vi. c. i. 001. Fr. of lacquered wooden bowl; inside red with marks (perhaps letters?) in black; outside, a sunk line of brown, then red ground on which are first two thin lines of black, then part of floral design (?)—ends of long grass or bird's tail—in black, green, and yellow. $1\frac{5}{8}'' \times 1\frac{1}{8}'' \times \frac{3}{16}''$.

T. vi. c. ii. 1. Early Sogdian wooden doc.; slip trimmed down R. side, broken away down L., inscr. at top with 4 ll. Sogdian and one char. (5th l.) and rectilinear diagram below. See T. xii. a. ii. 1–8, L.A. vi. ii. 0104; and Dr. A. Cowley, *J.R.A.S.*, Jan. 1911, pp. 159 sqq. $10\frac{3}{8}'' \times 1\frac{5}{16}''$. Pl. CLVII.

T. vi. c. ii. 001. Wooden bar, sq. in section, keeping at one end a rectang. return, now broken to $\frac{1}{4}''$ length. Down the stick are three holes filled by close-fitting pegs, of which the two nearest the end with return are broken short; the third proves to be the tenon of a flat curved piece well finished with bevelled edges, projecting on opposite side from the return. Broken at end. $5\frac{5}{8}'' \times \frac{7}{16}'' \times \frac{7}{16}''$. Cross-piece $2\frac{1}{2}'' \times \frac{1}{2}'' \times \frac{3}{8}''$.

T. vi. c. ii. 002. Leather tongue made of three to five strips superimposed and sewn together for half their length. Unsewn end rounded; sewn end roughly cut off and showing signs of having been bound round; along each edge of unsewn half are three semicircular perforations (for teeth of buckle?). Sewn half shows on one side three ornamental rows of woollen pile—crimson, dark blue, and yellow—the wool having been sewn down with buff thread on to top strip of leather, and ends then cut short; on other side this half shows remains of red lacquer. Prob. tongue of saddle or harness strap. $5'' \times \frac{3}{4}'' \times \frac{7}{16}''$. Pl. CX.

T. vi. c. iii. 001. Wedge-shaped wooden block, painted black except for oblong space left uncoloured upon one flat side, on which is short Chin. inscr. in black (much effaced); in top is hole with wooden plug and leather for fixing string handle (missing). Cf. T. vi. b. 003; viii. 1. $11'' \times 4\frac{1}{2}'' \times 2\frac{1}{4}''$ (max.).

T. vi. c. iii. 002. Wooden bracket; see T. viii. 004. Double hollow above, the concave side being divided into two smaller curves by a central point; on each side

incised lines following the outline of the double curve. Bracket proper $5\frac{1}{4}'' \times 2\frac{1}{4}'' \times 1''$, tenon $4\frac{1}{4}'' \times 2\frac{1}{8}'' \times 1\frac{1}{4}$. Pl. LIV.

T. vi. c. iii. 003. Wooden bracket; see T. viii. 004; variant as T. viii. 007, but smaller and less elaborate. Incisions only on end (where traces of yellow); sides plain; collar in relief between tenon and bracket proper. $3\frac{3}{4}''$ (with tenon, $7\frac{3}{8}''$) $\times 1\frac{7}{16}'' \times \frac{15}{16}''$. Pl. LIV.

FABRIC FOUND AT TOWER T. vi. d

T. vi. d. 001. Two small frs. of green silk fabric, plain weave. Gr. M. 1″

OBJECT FOUND ON GROUND NEAR TOWER T. vii

T. vii. 001. Bronze buckle; ring with cross-bar whereon is hinged (?) tongue. $1\frac{1}{16}'' \times \frac{15}{16}''$. Pl. LIII.

OBJECTS EXCAVATED AT WATCH-TOWER T. viii

T. viii. 1. Wedge-shaped wooden block, as T. vi. b. 003; vi. c. iii. 001. Painted black, with two or three large Chin. chars. in red on one flat side; in top, hole and wedge for fixing string handle (missing); scored with knife-cuts and otherwise damaged. $12\frac{1}{4}'' \times 5'' \times 2\frac{3}{8}''$ (max.). Pl. LII.

T. viii. 2. a–b. Rectang. wooden board, broken in two. *Obv.* painted purple all over (much faded), with border and a few Chin. chars. in black; *rev.* plain purple with black bands across it. See Chavannes, *Documents*, p. 127, No. 591′. $10\frac{3}{4}'' \times 6\frac{1}{4}'' \times \frac{5}{16}''$.

T. viii. 3. Wooden seal-case, type C; see T. viii. 5. String tied round; inscr. in ink on upper surface; hole through bottom. $2'' \times \frac{15}{16}'' \times \frac{9}{16}''$.

T. viii. 4. Wooden measure and 'set-square', or shoemaker's measure; made of straight main-piece and cross-piece put in at end with round tenon, both oblong in section. Measurements marked on bottom and narrow sides of main-piece by grooves which are coloured red and in many cases on sides edged by a black line; on narrow sides (only) of cross-piece by painted red lines; the divisions are somewhat irregular, but each seems intended to be $\frac{9}{10}''$. On one narrow side of main-piece at end away from cross-piece, five of these divisions are again subdivided into five (but one by mistake only into four); and across fifth groove on under side are cut diagonals also in red. A small hole $\frac{1}{8}''$ deep and $\frac{1}{8}''$ in diam. is drilled into end of cross-piece, and free end of main-piece is pierced for suspension string, which partially remains. The cross-piece forms rather less than a right angle with the main-piece; and the edge of the latter is not quite true. Cf. L.A. ii. vi. 001, and T. xi. ii. 13. Main-piece $10\frac{1}{4}'' \times \frac{3}{4}'' \times \frac{3}{8}''$, cross-piece $4\frac{3}{16}'' \times \frac{11}{16}'' \times \frac{7}{16}''$. Pl. LIV.

***T. viii. 5. Wooden seal-case,** type A; cf. L.B. iv. ii. 0010. $1\frac{5}{8}''$ sq. $\times \frac{3}{4}''$.

The types of seal-case are:

A. Roughly sq. block, side edges sometimes bevelled, the centre hollowed out in a sq., and three grooves sawn in sides for string to level of bottom of hollow, wherein clay seal was put.

B. Similar, but with hole bored through bottom.

C. Block, usually oblong, the middle cut away leaving up-standing ends but no sides; prob. also a seal-case, the strings being simply laid across, as in T. xii. 002. T. xvi. ii. 001 of this type retains strings and mud sealing, but differs in having hole bored through one end, through which string passes; most show no traces of mud. T. xv. a. ii. 005, T. xv. a. v. 005, etc., have slips of wood like matches wedged lengthways between the two ends at the bottom of the hollow. T. viii. 3 has a hole through the bottom, a string tied round, and traces of writing on the raised ends. T. xiv. vii. 004 has a hole pierced lengthways through the box.

For other examples see:—T. iii. 001; iv. b. i. 001; vi. b. i. 006; viii. 3, 0011–0017; xii. 12–13; xii. a. 005–0011, 0015–0018, a. ii. 001; xiii. i. 002, ii. 002–003 (Pl. LIII); xiv. ii. 005, v. 002; xv. a. 001, a. i. 002, a. ii. 005, a. iii. 002; xvi. ii. 001 (Pl. LIII); xvii. 002–004; xix. i. 001, 004, ii. 001 (Pl. LIII); xxviii. a–b.

T. viii. 001. Wooden apparatus, of doubtful use, very roughly made. It consists of two uprights $9\frac{3}{4}''$ apart, and two parallel cross-pieces tenoned into them, about $2\frac{1}{4}''$ apart; between these cross-pieces is a roller of 2″ diam., the upper and lower surfaces respectively of the cross-pieces being hollowed out to give it free play. Through the roller a slit is cut, about 5″ long and 1″ wide. Probably used in connexion with weaving or spinning. Well preserved. H. $11\frac{1}{2}''$. Pl. LII.

T. viii. 002. Pair of woven string shoes; woven over a last, in one piece like a modern sock. The woof is closely pressed and gives a ribbed mat-like texture over sole and vamp; for shaping heel, fresh woof threads were inserted low down on the bunched warp; higher up, the woof threads from one instep had to be spaced round the back of the heel to give necessary lunette shape, so that here a ladder-like effect is produced. Canvas was stitched on round the tops of the uppers for the width of the opening over instep; soles strengthened below with goat-skin in one case and felt in the other. Length *c.* 11″; breadth *c.* 3″ to $4\frac{1}{4}''$. Pl. LIV.

T. viii. 003. Cone-shaped wooden vessel, hollowed out of solid block, and with top of cone cut off; two small

holes pierced through side, opposite each other, $\frac{1}{2}$" from top, but no mark as of string; exterior inked black all over. H. $3\frac{1}{8}$", diam. at bottom 3", at top $1\frac{3}{4}$". Pl. LII.

*T. VIII. 004. **Wooden bracket;** one of many differing only slightly in decoration. A tenon $2\frac{1}{2}$" long $\times 1\frac{3}{4}$" $\times 1\frac{1}{4}$" terminates in bracket of same thickness, $5\frac{1}{2}$" long and $2\frac{3}{8}$" wide. Bottom of bracket straight, continuing line of tenon, but rounded off to end; top rises above line of tenon to a point from which it is scooped down about 1" in a curve that rises again to outer point, which is rounded off; this upper curved face is bevelled. Below, decoration consists of two deep grooves, running parallel with edges, taken up the rounded end and meeting at the rounded top in a splayed petal-like hollow, the central rib being rounded off short. On the two sides is orn. of incised lines—some highly stylized motive, prob. based on a flower; at top outer corner a circle or 'eye' whence radiate curved lines to lower edge, and (following curve of top edge) to wall face; or these are met by parabolic curved lines running from wall face to lower edge (T. XII. a. 001–3); a curved or zigzag line marks the centre of the bracket. The whole may be outlined by a groove following the contours of the bracket (T. XII. a. 001–3). There are traces of yellow and blue-black paint. Prob. the smaller examples were merely hooks for clothes or utensils (T. XIII. ii. 001); others were prob. meant to hang equipment and arms from. Other examples and variants:—T. V. 001–4; VI. b. iii. 001; VI. c. iii. 002, 003; VIII. 005–9, 0030–33, 0047; XII. a. 001–3; XIII. 001; XIII. i. 001; XIII. ii. 001. T. VIII. 004, Pl. LIV.

T. VIII. 005–006. **Two wooden brackets;** type of T. VIII. 004. Tenon of 006 is cut off at length of $1\frac{1}{2}$". Length of whole $7\frac{3}{4}$" (of tenon $2\frac{1}{2}$"), width $2\frac{5}{16}$" $\times 1\frac{1}{8}$". *005*, Pl. LIV.

T. VIII. 007. **Fr. of wooden bracket;** variant of T. VIII. 004. Hollow upper side not curved, but sloped down to make acute angle with end; tenon and part of bracket proper broken off. $4\frac{1}{4}$" (broken) $\times 1\frac{7}{8}$" $\times 1\frac{3}{8}$".

T. VIII. 008. **Wooden bracket;** see T. VIII. 004; variant as T. VIII. 007, but smaller. Incisions merely follow outline, no 'eye'; slight traces of yellow and black; complete. $6\frac{1}{4}$" (tenon 2") $\times 1\frac{7}{8}$" $\times 1\frac{3}{8}$". Pl. LIV.

T. VIII. 009. **Wooden bracket;** see T. VIII. 004; variant as T. VIII. 007, but smaller and ruder. Upper surface sloped to meet tenon at flat angle; no collar; incisions only on end; and in these and on sides remains of yellow and blue paint. $6\frac{3}{4}$" (tenon $2\frac{1}{2}$") $\times 1\frac{5}{8}$" $\times 1\frac{3}{8}$".

T. VIII. 0010. **Octagonal wooden block,** flat at both ends; into one end six holes *c.* $\frac{3}{8}$" in diam. irregularly pierced to depth of 2" to 3"; painted black all over, but paint now mostly worn off. A stand for holding sticks of incense (?). H. $3\frac{1}{2}$", diam. $3\frac{1}{4}$". Pl. LII.

T. VIII. 0011–0017. **Seven wooden seal-cases;** see T. VIII. 5. 0014 and 0015 of type C, remainder of type A. Average measurements $1\frac{7}{8}$" $\times$ (A) $1\frac{3}{8}$", (C) $\frac{7}{8}$", $\times \frac{5}{8}$".

T. VIII. 0018. **Flat rectang. piece of wood;** at one end a broad tenon; slightly thinned down to other end, where it is sharply bevelled off and pierced by hole $\frac{1}{2}$" in diam.; cf. T. XII. a. 0013. Length 2" (with tenon $3\frac{5}{16}$") $\times 1\frac{3}{8}$" $\times \frac{1}{2}$" to $\frac{1}{4}$".

T. VIII. 0019. **Wooden block** with two grooves, 1" $\times \frac{1}{4}$", across it; one end broken off down to bottom of groove; several saw-marks at bottom of each groove. Sawing block (?). $2\frac{1}{8}$" $\times 1\frac{7}{8}$" $\times 1\frac{5}{16}$".

T. VIII. 0020. **Half of wooden comb** with arched back as L.A. VI. ii. 0014. H. $3\frac{1}{16}$", width (broken) $1\frac{5}{8}$", length of teeth $1\frac{3}{8}$", 6 teeth to 1".

T. VIII. 0021. **Wooden block** roughly rectang., pierced with two $\frac{1}{4}$" holes; traces of purple paint. $3\frac{1}{4}$" $\times 1\frac{3}{4}$" $\times \frac{3}{8}$".

T. VIII. 0022. **Corner of wooden board,** coloured black one side, red the other; to black side sticks fr. of red silk fabric also painted over black. $3\frac{5}{8}$" $\times 1\frac{7}{8}$" $\times \frac{3}{16}$".

T. VIII. 0023. **Flat oblong piece of wood,** with edges of one end bevelled; stained dull purple. $2\frac{3}{8}$" $\times 1\frac{1}{8}$" $\times \frac{1}{4}$".

T. VIII. 0024. **Wooden disc;** on one side, edge cut in a curved bevel $\frac{5}{8}$" wide; on other side, edge square; in centre, hole $\frac{5}{8}$" sq.; across top, mark of pin holding axle. Bevel shows signs of friction. Diam. $3\frac{1}{2}$", thickness (centre) $\frac{9}{16}$", (edge) $\frac{3}{8}$".

T. VIII. 0025. **Wooden block,** D-shaped in section; one end and adjacent sides are wrapped in linen; on this, thick black paint. Apparently used for grinding the paint. Cf. T. XII. a. 0012, 0021. $1\frac{1}{2}$" $\times 1\frac{1}{2}$" $\times 1\frac{1}{4}$". Pl. LIV.

T. VIII. 0026. **Wooden bar,** slightly curved; in section an isosceles triangle, edge along apex being the convex. In concave base side are bored five holes, *c.* $\frac{1}{4}$" in diam. and about 3" apart; three not being in centre break through convex side of bar above. Traces of black paint both on sides and base. Cf. T. VIII. 0027. Length $14\frac{5}{8}$", width of base $\frac{7}{8}$", h. $1\frac{1}{16}$" (one end), $\frac{3}{4}$" (the other).

T. VIII. 0027. **Wooden bar** slightly curved as T. VIII. 0026, oblong in section; in narrow concave side four $\frac{1}{4}$" holes bored; one pierces to the other side, others $\frac{3}{4}$" deep. Remains of black paint. $10\frac{7}{8}$" $\times \frac{7}{8}$" $\times \frac{5}{8}$".

T. VIII. 0028. **Fr. of rectang. cov.-tablet** (?) showing part of seal cav.; fine wood; blank. $4\frac{7}{8}$" $\times 1\frac{1}{16}$".

T. VIII. 0029. **Fr. of wooden board;** red on one side, black on other; broken edges stained purple. Gr. M. $3\frac{1}{2}$".

T. VIII. 0030–0033. **Four wooden brackets;** see T. VIII. 004, but smaller and simpler. Only one groove down sides, making with concave upper edge a curved pear-shaped lobe; three grooves, or two, on end; underneath and side up to lobe painted black, lobe and end red. Tenons of 0032 and 0033 broken off. Average measurements, length $5\frac{1}{4}$" (tenons $1\frac{1}{4}$" and $1\frac{7}{8}$"), h. $1\frac{1}{4}$, thickness $\frac{5}{8}$". *0031*, Pl. LIV.

T. VIII. 0034. **Fr. of wooden bar,** roughly oblong in section and broken at one end; pierced through broader

sides by tapering peg projecting $1\frac{1}{2}''$ one side, $2\frac{1}{4}''$ the other; rope of three strands tied so as to embrace both peg and bar. Bar $4'' \times \frac{7}{8}'' \times \frac{1}{2}''$, length of rope beyond knot $13\frac{1}{2}''$.

T. VIII. 0035. Fr. from corner of wooden board, with rabbet at one squared end; black paint outside; wood stained red. $3\frac{1}{2}'' \times 1\frac{1}{8}''$.

T. VIII. 0036. Fr. of wooden vessel, covered outside with perished black lacquer, with perished red inside; corners are slightly rounded. $3\frac{1}{4}''$ (broken) $\times 2'' \times \frac{3}{8}''$.

T. VIII. 0037. Thin strip of wood; traces of glue. $3\frac{1}{4}'' \times \frac{3}{8}'' \times \frac{3}{32}''$.

T. VIII. 0038. Wooden spinning-whorl; plano-convex disc, pierced. Diam. $1''$, thickness $\frac{3}{8}''$.

T. VIII. 0039. Wooden stick roughly carved and painted in ink to represent head and neck of animal, prob. snake. Complete; head flat top and bottom, and pointed; curved grooves mark ears; mouth shown by V-shaped groove; at back of mouth hole pierced, through which passes suspension string (broken); neck long, thin, and oval in section. Most of head is black, and neck is painted in series of curves roughly meeting one another. Charm (?). $4\frac{1}{2}'' \times 1\frac{11}{16}'' \times \frac{9}{16}''$. Pl. LIII.

T. VIII. 0040. Length of thin rope broken at both ends; made of bundle of hemp (?) fibre wound round with finer twine. Length $1'\ 11\frac{1}{2}''$, diam. $\frac{1}{4}''$.

T. VIII. 0041. String of vegetable fibre tied in loop; coloured pink in parts. Diam. of loop *c.* $1\frac{1}{4}''$, diam. of string $\frac{3}{16}''$.

T. VIII. 0042. Shreds of reed, dried, twisted, and coloured purple. Gr. length *c.* $2''$.

T. VIII. 0043. Fr. of coarse goat's hair (?) fabric, loosely woven, dark brown and buff. $2\frac{1}{4}'' \times 3''$.

T. VIII. 0044. Toe of woven string sandal; type of T. XIV. a. 002. $4'' \times 3''$.

T. VIII. 0045. Flat ring of string or rope, bound round with finer string and loose hemp. Perhaps for carrying weights on the head. Diam. outside $7\frac{1}{2}''$, inside $4\frac{1}{4}''$, thickness $\frac{7}{8}''$.

T. VIII. 0046. Part of a garment (?) of buff silk, sewn with silk; rotten and much torn.

T. VIII. 0047. Wooden bracket; see T. VIII. 004, same type but larger. $8\frac{5}{8}''$ (tenon $3\frac{3}{8}''$) $\times 2\frac{1}{4}'' \times 1\frac{1}{8}''$.

OBJECTS FOUND ON SURFACE NEAR WATCH-TOWER T. XI

T. XI. 001. Large fr. of porcelain bowl; white body painted in dull blue under a greyish-white glaze; inside, two thin lines round rim, two round base, circle and twig pattern in centre; outside, two thin lines round rim, broad circles wherein twig pattern; between circles rough design of two flower stems (?) looped together. Chinese. Diam. $5\frac{1}{2}''$, h. $2\frac{7}{8}''$.

With this is joined up T. XI. 008, and 0011 also belongs to it. Pl. IV.

T. XI. 002–004. Three frs. of rims of porcelain bowls of ware similar to T. XI. 0012. Straight-sided, rim very slightly everted. Outside, rough floral design similar to that of T. XI. 009–0010; inside, round top, row of elliptical spots above double line. Five rivet-holes in outside of 004, not pierced through. Chinese. Gr. M. $2\frac{1}{8}''$.

T. XI. 005. Fr. of stoneware; coarse hard buff clay; on outside, brilliant black-brown glaze. Chinese. Gr. M. $1\frac{7}{16}''$.

T. XI. 006. Fr. of pottery, wheel-made, of grey-burning clay; well levigated, kiln-fired; on outside, band of four incised lines. Gr. M. $2\frac{5}{8}''$.

T. XI. 007. Fr. of pottery, wheel-made, of well-levigated clay, kiln-fired and 'smothered'; on outer face rude stick-drawn wave orn. Gr. M. $2\frac{9}{16}''$.

T. XI. 008 and 0011. Two frs. of porcelain belonging to T. XI. 001; 008 joined to it.

T. XI. 009–0010. Two frs. of porcelain bowl, side and rim; side straight, rim very slightly everted. Painted in dull blue under greyish-white glaze; rough floral design outside; inside (0010) elliptical dots above double line. Same ware and pattern as T. 0027; XI. 002–004; XVIII. 003. Chinese. Gr. M. $2\frac{1}{2}''$. *0010*, Pl. IV.

T. XI. 0012. Part of porcelain bowl; bottom with base-ring and side. Body of coarse greyish porcelain painted roughly in dull blue under a greyish-white glaze; base unglazed and showing part of a brown ring; roughly scrawled floral orn. inside and out. Same ware as T. XI. 001, etc. Chinese. Gr. M. $2\frac{9}{16}''$.

OBJECTS EXCAVATED FROM REFUSE-LAYERS OF WATCH-STATION T. XI

T. XI. ii. 13. Measure, made of slip of cane, with divisions scratched on outer surface. The unit is $\frac{9}{100}''$ (0·0023 m.) and the system is decimal. Measure is $9\frac{1}{8}''$ long, divided into 10 by incised lines of which central one is marked by a cross; each division subdivided into ten units by small cuts made on opposite edges of the measure in alternate divisions; hole pierced at one end. Cf. T. VIII. 4.

T. XI. ii. 001. Fr. of buff silk fabric, tied up in bag with small black object, perhaps spice, inside; torn. Orig. prob. $3\frac{1}{2}''$ sq.

T. XI. iii. 001. Strip of faded red silk in tatters; plain weave. Length *c.* $2'$.

T. XI. iii. 002. Uppers of felt slipper with traces of

leather sole; felt covered with woollen cloth, having warp of twisted buff yarn and weft of fine red wool, close-pressed, concealing warp and giving ribbed effect. Ragged and worn. Length 11".

T. xi. iv. 001. Part of ovoid wooden bowl, like T. vi. b. ii. 001; was lacquered, but lacquer has all come off except a trace. Length $2\frac{7}{8}$", width of base $1\frac{7}{8}$", above 3", h. $1\frac{1}{8}$".

T. xi. iv. 002. Fr. of cane split from knot downwards; end sharpened to point. 5" × 1".

OBJECTS EXCAVATED FROM QUARTERS AND REFUSE OF WATCH-TOWER T. XII

T. xii. 1. Pottery fr., hand-made, of fairly well levigated red clay, grey-burning, fired on an open hearth, with 'mat-marking' on outer face. Cf. T. iii. 004. Gr. M. $2\frac{1}{4}$".

T. xii. 2. Fr. of pottery vessel, wheel-made, of grey-burning fairly well levigated clay, kiln-fired, with 'mat-marking' on outer face. Cf. T. iii. 004. Gr. M. 3". Pl. IV.

T. xii. 3. Pottery fr., wheel-made (?), much weathered, of poorly levigated red clay burning to grey; fired on an open hearth and 'smothered'; grey-black exterior orn. with 'mat-marking'. Cf. T. iii. 004. Gr. M. $2\frac{7}{8}$".

T. xii. 12-13. Two wooden seal-cases; 12, type A; 13, type C. See T. viii. 5. *12,* $1\frac{3}{4}$" × $1\frac{1}{8}$" × $\frac{7}{8}$"; *13,* $1\frac{1}{2}$" × $\frac{11}{16}$" × $\frac{7}{16}$".

T. xii. 001. Flat piece of wood, roughly sq., with rude hole $\frac{1}{4}$" in diam. in centre. $1\frac{5}{16}$" × $1\frac{1}{4}$" × $\frac{1}{8}$".

T. xii. 002. Wooden seal-case, type C; see T. viii. 5. String tied round. $2\frac{1}{4}$" × 1" × $\frac{1}{2}$".

T. xii. 003. Wooden peg, oblong in section, with sq. head bevelled to point; broken at other end. $3\frac{1}{8}$" × $\frac{9}{16}$" × $\frac{9}{16}$" to $\frac{1}{4}$".

T. xii. 004. Fr. of pottery vessel; flat bottom (?) pierced with holes, $\frac{7}{8}$" in diam. Wheel-made, of well-levigated grey-burning clay, kiln-fired. Orig. diam. *c.* $8\frac{1}{2}$". Gr. M. $4\frac{1}{2}$".

T. xii. 005. Rope and wooden peg. Peg rounded and tapered to a point (now broken), then split flat down one side. In one sharp edge groove cut, in which is fastened a rope of two strands by means of slip-knot. Peg $7\frac{3}{4}$" × $\frac{5}{16}$" × $\frac{3}{8}$"; rope, length 18", diam. $\frac{7}{16}$".

T. xii. 006. Wooden fire-stick (female), unfinished; one edge squared, with three 'hearths' near one end, unused; other edges and back broken off. Cf. L.A. v. ii. 1. $5\frac{3}{4}$" × $\frac{7}{8}$" × $\frac{3}{8}$".

T. xii. 007. Wooden pen; made of stick with bark on, trimmed to a point. $9\frac{1}{4}$" × $\frac{1}{2}$" to $\frac{1}{16}$".

T. xii. 008. Wooden strip, apparently once lacquered. $8\frac{7}{8}$" × 1" × $\frac{3}{16}$".

T. xii. 009. Wooden stick with bark still on, cut neatly sq. at one end, and into a wedge at the other; out of this wedge the pith has fallen. Length 8", diam. $\frac{3}{8}$".

T. xii. 0010. Part of lacquered wooden bowl, strip from rim to base; black outside, inside red over black. Cf. T. vi. b. ii. 001. H. *c.* 6", thickness at rim $\frac{1}{16}$", at base $\frac{1}{2}$".

T. xii. 0011. Flat wooden strip pointed at one end. $4\frac{5}{16}$" × $\frac{3}{8}$" × $\frac{1}{8}$".

T. xii. 0012. Wooden pen; made of twig with bark on, pointed at one end. Length $3\frac{1}{2}$", diam. $\frac{3}{8}$".

T. xii. 0013. Wooden spatula with flat oval bowl; handle broken. Length $4\frac{1}{2}$", bowl $2\frac{1}{4}$" × $1\frac{1}{4}$".

***T. xii. 0014-0015. Two painted wooden knobs,** oblong in section, bevelled off above to four-sided point and tapering below to smaller oblong neck. 0015 in good condition, neck unpainted, head painted black and red; 0014 broken, sand-encrusted, red paint only. Perhaps stoppers. Other examples:—T. xii. 0019; xv. 001-003; xxvi. 001; xxvii. 009, 0013. *0015*: h. $2\frac{1}{8}$", of head only $1\frac{1}{2}$"; gr. width $1\frac{1}{4}$", gr. thickness $\frac{3}{4}$".

T. xii. 0016. Wooden pen; roughly pointed stick with bark still on. $3\frac{1}{2}$" × $\frac{3}{8}$".

T. xii. 0017. Part of wooden needle (?). End above eye broken off; eye part flat, but when complete at least $\frac{5}{8}$" wide. Length $5\frac{1}{2}$", width $\frac{5}{8}$" to $\frac{1}{16}$", thickness $\frac{1}{4}$" to $\frac{1}{16}$", width of eye $\frac{1}{2}$".

T. xii. 0018. Oblong piece of wood; one long side broken off, the others squared; in middle two holes, in which are strings, knotted on one side, cut off flush with surface of wood on the other. $5\frac{1}{8}$" × $1\frac{1}{4}$" × $\frac{3}{8}$".

T. xii. 0019. Wooden knob; see T. xii. 0015; traces of black paint. $2\frac{1}{4}$" × $\frac{7}{8}$" sq. (max.).

T. xii. 0020. Arrow. Iron tang (broken in two pieces); bronze head, type of T. 007; sides plain, point rounded. Length of tang $8\frac{3}{8}$", diam. $\frac{3}{16}$", length of head $1\frac{3}{8}$". Pl. LIII.

T. xii. 0021. Three frs. of rope: one, plaited hemp, with loop at end as T. xii. a. 0031, 11" × $\frac{3}{8}$"; two of string made of coarse fibre, 17" × 5" long × $\frac{3}{16}$" diam.; one, flat plaited rope made of goat's hair (?), 9" × $\frac{7}{8}$" × $\frac{1}{4}$".

T. xii. 0022. Felt inner sole of shoe. 10" × $3\frac{1}{8}$".

T. xii. 0023. Fr. of string shoe sole, hemp; string coiled flat and bound by string passing through transversely. Gr. M. 5".

T. xii. 0024. Two pieces of matting of plaited cane. The strips of cane, *c.* $\frac{1}{4}$" wide, run diagonally to the edge of the material, and each passes under and over alternately sets of three strips running at right angles; each strip starts passing under or over one sooner than its fellow on one side, and one later than the strip on the other. Both pieces are doubled, the two sides being tied close with

string; mat was evidently doubled again when burnt, the edges of each piece being equally charred. $5'' \times 10''$.

T. XII. 0025. Wooden peg; flat on one side, rounded on other; wedge-shaped point. $2\frac{1}{8}'' \times \frac{5}{16}'' \times \frac{3}{32}''$.

T. XII. 0026. Fabric frs.; much torn piece of buff silk sewn to small strip of blue; both plain weave. Length 6″.

T. XII. 0027. Coarse hemp cord, two-ply, broken each end. Length 1′ 5″, diam. $\frac{5}{16}''$.

T. XII. 0028. Strip of buff silk fabric, fine plain weave. *C.* $19'' \times 1''$.

T. XII. 0029. Two frs. of hemp or cotton fabric, light buff, loose plain weave; edges of one charred. Gr. fr. $1' \times 9\frac{1}{4}''$. [Not analysed.]

T. XII. 0030. Bottom of cane basket. Nine or ten flat slips of cane (some broken) interlace across bottom making solid centre *c.* 3″ in diam., beyond which rise their free ends to form ribs. In and out over every alternate rib are woven long narrow strips of cane roughly sq. in section; the intermediate ribs being left free in inside of basket, but possibly taken into the weave higher up. Diam. extant 6″.

OBJECTS EXCAVATED FROM QUARTERS OF WATCH-TOWER T. XII. A

T. XII. a. 001–003. Three wooden brackets; see T. VIII. 004. Same type, but upper surface less hollowed out; remains of yellow and indigo paint. Average measurements $8\frac{1}{8}''$ (tenon 3″) $\times 2\frac{1}{4}'' \times 1\frac{1}{2}''$. *003*, Pl. LIV.

T. XII. a. 004. Spec. of calcined reeds from stacks of fascines near tower. Gr. M. $3\frac{1}{4}''$. Pl. LII.

T. XII. a. 005–0011. Seven wooden seal-cases; 005–0010, type A; 0011, type C; see T. VIII. 5. 009 is $1\frac{3}{8}''$ deep and has groove $\frac{5}{8}'' \times \frac{1}{2}''$ cut across under side. Average measurements $1\frac{3}{4}'' \times 1\frac{1}{2}'' \times \frac{5}{8}''$. *006, 009*, Pl. LIII.

T. XII. a. 0012. Wooden block with square ends and bottom, the top rounded and slightly hollowed in the middle; both broad sides are dinted with small irregular bruised holes. Prob. a paint-grinder; cf. T. VIII. 0025, XII. a. 0021. $1\frac{3}{4}'' \times 1\frac{1}{2}'' \times 1''$.

T. XII. a. 0013. Flat oblong piece of wood; cf. T. VIII. 0018. At one end both long edges bevelled to a wedge; other end has all edges slightly bevelled, and $\frac{3}{8}''$ hole in corner; one long edge bevelled on one side; on both sides traces of a line in ink across middle. $2\frac{1}{4}'' \times 1\frac{5}{16}'' \times \frac{3}{8}''$.

T. XII. a. 0014. Round wooden stopper pierced vertically; through hole is string broken short; top edges bevelled, rabbet ($\frac{1}{4}'' \times \frac{1}{8}''$) round bottom edge; painted black. H. $\frac{3}{4}''$, diam. $1\frac{1}{4}''$.

T. XII. a. 0015–0018. Four wooden seal-cases, type C; see T. VIII. 5. 0018 has slip of wood wedged across bottom of groove; cf. T. XV. a. ii. 005; 0017 has four notches underneath. *0015* (largest) $1\frac{7}{8}'' \times 1\frac{3}{8}'' \times \frac{3}{4}''$.

T. XII. a. 0019. Miniature wooden bracket (?) made of flat wooden strip thinned at each end; from middle of one thin edge two 'horns' project roughly at right angles, embracing an arc of about 90°. $5\frac{3}{4}'' \times \frac{3}{4}''$ to $\frac{5}{16}'' \times \frac{5}{16}''$ to $\frac{1}{8}''$.

T. XII. a. 0020. Wooden bar, oblong in section, well finished with bevelled edges; at one end two holes close together; other end (broken) has mortice, tenon from second block fitting therein, a wooden peg securing tenon, and traces of glue and binding round. $3\frac{5}{8}'' \times \frac{5}{8}'' \times \frac{7}{16}''$.

T. XII. a. 0021. Wooden block, prob. a paint-grinder; see T. XII. a. 0012 (for shape), and (for use) T. VIII. 0025. $1\frac{7}{16}'' \times 1\frac{15}{16}'' \times 1\frac{15}{16}''$.

T. XII. a. 0022. Round wooden stick cut thinner for 1″ at each end; through each true end and each end of the thicker part is a hole with remains of peg; all four holes are in line. Length 7″, diam. $\frac{1}{2}''$ to $\frac{3}{8}''$.

T. XII. a. 0023. Thin wooden pin with loose pear-shaped head; latter made separately, in two pieces, of which only narrower remains; cf. L.B. IV. 005. Length of pin $8\frac{3}{4}''$, diam. $\frac{3}{16}''$ to $\frac{1}{8}''$, head $1'' \times \frac{5}{8}''$ to $\frac{7}{16}''$.

T. XII. a. 0024. Wooden stick, flat on one side, rounded the other, and bent so that flat side is convex; pointed at each end; round each end are tied ends of one piece of string. Apparently a bow, perhaps for a small drill. $8\frac{1}{4}'' \times \frac{3}{8}'' \times \frac{3}{16}''$. Pl. LIII.

T. XII. a. 0025. Finial carved in wood, as if of miniature Stūpa; oblong in section with five umbrellas; tenon for attachment below broken; painted black all over. $1\frac{1}{4}'' \times 1''$ to $\frac{3}{4}'' \times \frac{7}{8}''$ to $\frac{5}{8}''$. Pl. LIII.

***T. XII. a. 0026. Iron skewer,** oblong in section; end bent into ring-handle, round in section; corroded. Cf. T. XVIII. ii. 9 b; XXVIII. 0019; T. W. 005, 007. Length of whole 6″, of pin $5\frac{1}{4}''$, gr. width of pin $\frac{1}{4}''$, thickness $\frac{1}{8}''$. Pl. LIV.

T. XII. a. 0027. Bundle of reeds, probably for matting, tied round with six strings at intervals of *c.* 3″; each string knotted and cut short, not as in mat T. XIV. i. 006. Length $15\frac{1}{4}''$, diam. $\frac{7}{8}''$ to $\frac{1}{2}''$.

T. XII. a. 0028. Two bundles of reeds, for matting; stems tied round with string, each bundle in three places Length *c.* 4″, diam. *c.* $\frac{3}{4}''$.

T. XII. a. 0029. Bundle of reeds, like T. XII. a. 0027; tied with string in five places. Length $9\frac{1}{4}''$, diam. $\frac{7}{8}''$ to $\frac{1}{2}''$.

T. XII. a. 0030. Skin and skeleton of snake. Length (twisted) $7\frac{7}{8}''$, diam. *c.* $\frac{7}{8}''$.

T. XII. a. 0031. Noose of coarse rope. Rope is bent double, and $3\frac{1}{2}''$ from bend the two ends are divided and plaited together to make one four-ply rope of double size, the end of which is passed through the loop and knotted. Diam. of rope, double $\frac{7}{8}''$, single $\frac{1}{2}''$, inside diam. of loop $3'' \times 1\frac{3}{4}''$.

T. xii. a. 0032. Round wooden stick, with one end bevelled off, and charred; near this end, in same plane as bevel, a notch; stick warped round into a ring; other end broken where notch was. 'Dead-eye'? Diam. of ring $2\frac{3}{4}''$; of stick $\frac{1}{2}''$.

T. xii. a. 0033. Fr. of quilted sole of fabric shoe (?); made of three pieces of coarse hemp (?) fabric, light buff, placed one above the other and quilted together by longitudinal rows of running strings *c.* $\frac{3}{8}''$ apart; ends of fabric and strings cut across. Transversely another thicker cord was run, which was turned at the edge and brought back to form successive rows *c.* $\frac{1}{2}''$ apart; on one side of the fabric this cord was then cut off wherever it appeared, leaving short tufts; perhaps strengthening under-side of sole; cf. T. xviii. iii. 002. The inner layer of fabric is coated with black pigment on each side, perhaps 'waterproofing'. $6\frac{1}{4}'' \times 3\frac{3}{4}''$.

T. xii. a. 0034. Bundle of dried grass tied round in two places with string (round stalks and round flower). $14\frac{1}{2}'' \times 3\frac{1}{2}'' \times 2''$.

T. xii. a. 0035. Piece of buff silk fabric, plain weave, knotted at one end, and hemmed with silk thread. Length 1'.

T. xii. a. 0036. Fr. of blue silk fabric. Gr. M. 1".

T. xii. a. 0037–0038. Calcined reeds, two lumps of slag, from stacks of fascines near tower; cf. T. xii. a. 004. Gr. M. $3\frac{3}{8}'' \times 2\frac{1}{2}''$.

T. xii. a. 0040. Fr. of birch-bark, uninscribed. *c.* $2'' \times \frac{1}{2}''$.

T. xii. a. 0041. Specimen of reed from stack of fascines. Length 6".

T. xii. a. i. 001. Wooden peg, top cut and painted in likeness of human head as T. 002, but very rude work; bark left on down sides; only one notch (below nose), top of head cut roughly off. $6\frac{7}{8}'' \times 1\frac{5}{16}'' \times \frac{5}{8}''$.

T. xii. a. i. 002. Wooden pen (?); stick trimmed to a point; two crosses cut on it, same side, near broad end. Length $6\frac{3}{16}''$.

T. xii. a. i. 003. Wooden peg, cut rudely round and trimmed to narrow wedge ending in bevel like a chisel blade. $3\frac{11}{16}'' \times \frac{1}{2}''$ to $\frac{1}{4}'' \times \frac{7}{16}''$ (max.).

T. xii. a. i. 004. End of wooden writing slip, blank. $2\frac{1}{2}'' \times \frac{5}{16}'' \times \frac{1}{16}''$.

T. xii. a. i. 005. Bronze arrow-head, type of T. 007, with part of iron tang; blunt rounded point, sides plain, good condition. Length of whole $1\frac{5}{8}''$, of head $1\frac{1}{16}''$. Pl. LIII.

T. xii. a. i. 006. Pottery fr., wheel-made, of well-levigated grey-burning clay, kiln-fired; round shoulder, band of incised comb-drawn lines with band of wave-pattern below; badly potted. Gr. M. $3\frac{1}{2}''$.

DOCUMENTS AND MISCELLANEOUS OBJECTS FOUND IN DUSTBIN T. xii. a. ii

T. xii. a. ii. 1. and 1. a. Early Sogdian paper doc., found folded and tied with string. On obv. at each end, as thus folded, 3 short ll. writing (address) separated by vertical pen-lines (at one end partially destroyed). Inside, unfolded, 12 ll., written parallel to long side of folio, clear and black, and apparently complete except where edges of paper are broken.

For a detailed analysis of the paper in T. xii. a. ii. 1–8, which is thin, yellowish, of uneven texture, and has proved to be made of rags, see J. von Wiesner, *Über die ältesten bis jetzt aufgefundenen Hadernpapiere*, Sitzungsberichte der K. Akad. der Wiss., Wien, clxviii, 1911. 1 a is strip of blank paper broken from R. edge.

See L.A. vi. ii. 0104, and T. vi. c. ii. 1; also A. Cowley, *J.R.A.S.*, Jan. 1911, pp. 159 sqq.; R. Gauthiot, *ib.*, pp. 497 sqq. $16'' \times 9\frac{3}{4}''$. Pls. CLIII, CLV.

T. xii. a. ii. 2. Early Sogdian paper doc., found folded and wrapped in brown silk, within outer cover of coarse hemp (?) fabric, which is inscribed with similar chars. Small frs. of paper adhere to outside of cover, perhaps from an additional wrapper. Doc. (unfolded) *obv.* 60 ll., written parallel to short side of folio, clear and black; *rev.* (in one corner) 3 short ll., and address near edge as in 1. On hemp cover, traces of 7 ll. Paper as in 1, broken along folds. $16\frac{3}{8}'' \times 9\frac{1}{2}''$; cover $5\frac{1}{2}'' \times 3\frac{3}{4}''$. Pls. CLIII, CLIV.

T. xii. a. ii. 3. Early Sogdian paper doc., found folded and tied with string. On outside (folded), address as in 1. On inside (unfolded), 26 ll. running parallel to long side of fol., and 9 ll. across at one end; clear and black. Paper as in 1, broken along folds. $16\frac{1}{2}'' \times 9\frac{3}{4}''$. Pls. CLIII, CLVII.

T. xii. a. ii. 4. Early Sogdian paper doc., found folded. On outside (folded), address as in 1. On inside (unfolded), 8 ll. running parallel to long side of fol. and one l. across one end; clear and black. Paper as in 1, broken along folds. $16'' \times 9\frac{1}{2}''$. Pl. CLV.

T. xii. a. ii. 5. Early Sogdian paper doc., found folded and tied with string. Fr. only of address preserved on outside. Inside 23 ll. running parallel to long side of fol., and 9 ll. across one end; clear and black. Paper as in 1, but considerably broken, and parts of several ll. lost. $12\frac{1}{4}'' \times 9\frac{1}{2}''$. Pls. CLIII, CLVI.

T. xii. a. ii. 6. Early Sogdian paper doc., found folded; incomplete. Fr. only of address preserved on outside. Inside, right-hand portion of 23 ll. running prob. parallel to short side of fol., black and fairly clear. Paper as in 1. 4" (incomplete) $\times 9\frac{5}{8}''$. Pls. CLIII, CLVI.

T. xii. a. ii. 7. Early Sogdian paper doc., found folded. No address preserved. Inside, parts of 7 ll. running parallel to long side of fol., and one l. running across one

end; but most of middle of sheet (as unfolded) lost, and hence all ll. except first incomplete. Writing black and clear. Paper as in I. 16″ × 5⅜″. Pls. CLIII, CLVI.

T. XII. a. ii. 8. a–g. Frs. of Early Sogdian paper doc.; *g* main part of large fol. found folded. *a–f* small frs., some perhaps belonging to *g*. Latter shows traces of address on back, and inside remains of 10 ll. running parallel to long side of fol. and one l. across one end. Writing fairly clear, and black, but middle of sheet with greater part of last 4 ll. lost. Of small frs., *a* is blank, *b* shows frs. of 9 ll., and the rest a few chars. each. Paper as in I. *g* 15⅝″ × 7″; *b* (largest fr.) 3½″ × 1⅛″. Pls. CLIII, CLIV, CLVII.

T. XII. a. ii. 20. Fr. of fine silk, plain, undyed, much torn; showing remains of 9 ll. Khar., faint, on one side. 3⅝″ × 2⅝″. Pl. XXXIX.

T. XII. a. ii. 001. Wooden seal-case, type A; see T. VIII. 5; string passing through one groove and tied round block. 1⅜″ × 1¼″ × ½″.

T. XII. a. ii. 002. Specimen of refuse.

T. XII. a. ii. 003. Fabric frs. from rubbish; silk, all plain or fine corded weave, and ragged; including:—4 frs. buff, 3 frs. red, 1 fr. pink, 1 fr. grey, 1 fr. grey sewn to fr. of blue, 1 fr. blue, 1 fr. blue sewn to fr. of buff, cord of four pieces silk (3 buff, 1 green) knotted together; lump of cotton waste, covered with red silk, and with string of blue silk attached to it; and 1 fr. grey hemp or cotton fabric, plain weave. Gr. M. *c.* 10″.

T. XII. a. ii. 004. Flat strip of wood with one edge cut into a series of varying curves divided by pointed notches; at one end a hole. Perhaps the leg of a model piece of furniture (?). 4¼″ × ⅞″ × ⅛″. Pl. LIII.

T. XII. a. ii. 005. Wooden die (?); oblong block painted black; cf. T. XXVII. 007–008, XXVIII. k–n. $\frac{13}{16}$″ × ½″ × ⅜″.

T. XII. a. ii. 006. Short wooden stick, pointed at one end. It passes through a piece of cane; round this, string is wound tightly, and continues up stick away from the point, though no second piece of cane to support it remains. Possibly from joint of arrow-head, a socketed metal head having been fixed to reed by a separate wooden tang. Length of stick 2″, diam. *c.* ⅛″, diam. of cane $\frac{7}{16}$″, length covered with wound string 1$\frac{1}{16}$″. Pl. LIII.

T. XII. a. ii. 007. Finial carved in wood, as if of miniature Stūpa; rectang. with five umbrellas, as T. XII. a. 0025, but narrower; edges all worn off. 1$\frac{11}{16}$″ × $\frac{15}{16}$″ × ⅞″.

OBJECTS EXCAVATED AT WATCH-STATION T. XIII

T. XIII. 001. Wooden bracket; see T. VIII. 004; variant as T. XII. a. 001; tenon broken. Bracket proper 4½″ long (with broken tenon 6½″) × 2⅜″ × 1½″.

T. XIII. 002. Flat piece of wood, with two-thirds of its thickness cut away except at one end. This raised block is finished off with a curved bevel, and pierced by a hole $\frac{1}{16}$″ in diam.; each end is cut into four teeth by three grooves *c.* ⅛″ wide × ¼″ deep; whole shows traces of dark paint. 5¾″ × 1⅛″ × $\frac{9}{16}$″ to $\frac{3}{16}$″.

T. XIII. 003. Woven string sandal, type of T. XIV. a. 002, but still stronger make; most of fore-part gone, but point of toe preserved. From refuse-heap S. of tower. Length 11½″, gr. width 4″.

T. XIII. 004. Woven string sandal, type of T. XIV. a. 002; side-loops gone and whole of heel. From refuse-heap to S. of tower. Length 9″ (incomplete), gr. width 4¼″.

T. XIII. 005. Bronze arrow-head; a round core fitted with three barbs along its whole length; much corroded; iron tang. Length of head 1⅝″, of whole 3$\frac{1}{16}$″. Pl. LIII.

T. XIII. 006–007. Two bronze arrow-heads, type T. 007, but XIII. 007 has sharper point; sides plain, remains of iron tang. Length 1⅛″.

T. XIII. 008. Lentoid bead of grey pebble, naturally polished; cut flat at ends. Diam. $\frac{9}{16}$″.

T. XIII. 009. Piece of bone, hollowed out into a tube; one end plugged with wood. Length 2$\frac{3}{16}$″, diam. *c.* ⅜″.

T. XIII. i. 001. Wooden bracket; see T. VIII. 004. Variant,—both sides slightly curved and parallel, and no knob at end; decoration in black and red paint; no incisions; circle on each flat side, and arrangement of curved lines suggesting feathers; on convex side more curved lines. Condition good. 7″ (tenon 2⅜″) × 1⅜″ × 1½″. Pl. LIV.

T. XIII. i. 002. Wooden seal-case, type C; see T. VIII. 5; traces of black colour. 1⅝″ × 1⅜″ × ⅝″.

T. XIII. i. 003. Wooden spatula (?), like model oar; straight rectang. blade 2½″ × ½″, very slender rounded shaft. Total length (broken) 10″.

T. XIII. i. 003. a. Small bag of grey silk, the lining cut from Chin. letter on silk and its inscr. showing on outer side. Very fine texture and plain weave. Constructed of four pieces:—the mouthpiece—a square with round hole in centre; sides—a tube sewn by its upper end to edges of hole; bottom—a circular piece sewn to and closing lower end of tube. A folded strip sewn by its centre to one side of upper end of tube forms a band for tying up the mouth. Much split and very brittle. For Chin. letter see Chavannes, *Documents*, No. 398, and Pl. XX. Length *c.* 3½″, sq. top 3½″.

T. XIII. i–ii. 001. a–b. Fabric frs.; red, grey, and buff silk, plain weave; pieces of buff silk twisted into cord, and two pieces of buff hemp or cotton fabric, coarse. Gr. M. (cord) 2′2″.

T. XIII. ii. 001. Wooden bracket; see T. VIII. 004; variant as T. VIII. 007, but much smaller. Painted decoration of black diagonal lines on red ground; paint much destroyed, especially round the hook at the end,

where the wood has been much worn on top and sides owing to objects hanging on it. $6\frac{1}{4}''$ (of which tenon $2\frac{7}{8}''$) $\times 1\frac{5}{8}'' \times \frac{5}{8}''$.

T. xiii. ii. 002–003. **Two wooden seal-cases,** type A; see T. viii. 5. 003 retains string and most of clay of seal; bad condition. *002*, $1\frac{7}{8}'' \times 1\frac{1}{8}'' \times \frac{3}{4}''$; *003*, $1\frac{3}{4}'' \times 1\frac{5}{8}'' \times \frac{5}{8}''$. Pl. LIII.

T. xiii. iii. 001. **Handle of broom made of split cane.** A small handful of the cane was first taken, and 5″ from the end a string wrapped twice round to secure it; the end of the string was then brought through the cane slithers, looped round the two bindings, and taken back again through the canes; then a second small bundle was laid against the first at the point where the string issued from it; the string was passed through the middle of the second bundle, taken twice round the two combined, then right through again to be looped across this second binding; and so back and out, when a third bundle was added. The several bindings come about $\frac{1}{2}''$ apart and are eight in number; each successive bundle, being tied nearer to the handle end, spread out more freely and gave a better whisking surface; finally, the string was knotted firmly round the last binding, and the cane ends were neatly rounded off for the handle. Much worn down by use. Length $6\frac{1}{2}''$, circumference at handle $4\frac{1}{2}''$.

OBJECTS EXCAVATED FROM REFUSE DEPOSITS OF MOUND T. XIV

T. xiv. 001. **Fr. of base of lacquered wooden bowl,** oval like T. vi. b. ii. 001; red inside, black out. $1\frac{3}{4}'' \times \frac{3}{4}'' \times \frac{1}{8}''$.

T. xiv. 002. **Wooden seal-case,** type C; see T. viii. 5. Painted black except at ends and in hollow, roughly cut. $2\frac{1}{4}'' \times 1\frac{1}{8} \times \frac{3}{4}''$.

T. xiv. 003. **Axe blade of wrought iron.** Curved cutting edge; sides have been doubled over at back to make rectang. oblong socket for handle; blade consequently shield-shaped. Fine example of ironwork. Length of blade $4\frac{7}{8}''$, depth of blade 4″, thickness of blade from $\frac{1}{2}''$, length of socket 2″. Pl. LIV.

T. xiv. 004. a–e. **Frs. of fabrics and paper** from refuse layer on S. face of mound, including:—(*a*) fr. of imperfectly made paper (silk spun?). Its present condition is that of a loose felt, which may be the result of the paper's being soaked in water, or of the pulp's being left unfinished; cf. the more completely made paper T. xiv. i. 003. Gr. fr. $5\frac{1}{2}'' \times 2\frac{1}{2}''$. (*b*) Fr. of coarse goat's hair fabric, buff, ribbed weave. $6'' \times 10\frac{1}{2}''$. (*c*) Fr. of close-woven red-brown woollen fabric, sand-encrusted. $4\frac{1}{2}'' \times 2\frac{1}{2}''$. (*d*) Fr. of fine buff woollen fabric. Gr. length 8″. (*e*) Fr. of coarse hemp fabric, faded brown, plain weave. $3\frac{1}{2}'' \times 4\frac{1}{2}''$. (*b*) Pl. XLVIII.

T. xiv. 006. **Eight pointed wooden slips;** one shows two faded Chin. chars., the rest are apparently teeth for a trap like T. xv. a. i. 009 (q. v.). Length $2\frac{1}{4}''$ to $3\frac{1}{2}''$.

T. xiv. i. 001. **Twelve wooden writing slips,** blank. Gr. length 14″.

T. xiv. i. 002. **Fabric frs.,** including one piece of buff silk and one of dark blue with turned-over edge sewn with buff silk; both plain weave, very ragged. Gr. M. 11″.

T. xiv. i. 003. **Five frs. of paper;** soft thick felted make, very ragged. Gr. M. 7″.

T. xiv. i. 004. **Misc. hemp (?) frs.** including:—one piece of coarse buff fabric, one piece of string ($\frac{1}{10}''$ diam.), two pieces of coarse thin felt or paper; all very ragged. Gr. M. (string) *c.* 1′.

T. xiv. i. 005. **Fr. of silk embroidery;** fine dark blue corded silk, showing part of floral (?) design worked in close rows of chain-stitch in red, light blue, and green, outlined with buff. Fine work. Cf. Ch. iv. 002. Gr. M. $1\frac{1}{2}''$.

T. xiv. i. 006. **Grass matting** found in entrance passage of shrine. Matting made as follows:—two-ply hempen cords (five survive) were laid parallel on the ground, 3″ to $3\frac{1}{4}''$ apart, rather more than double the length of the proposed mat; a knot was made in each cord some way to one side of the middle; a small bundle of grass 3″ in circumference, and (at present) about 18″ long, was laid at right angles across the cords by the knots; the longer end of each cord was then brought over the grass bundle, under the cord, and up through its own loop; a second bundle was laid close alongside the first and the process repeated. The lower cord was kept stretched all the time, and so passed straight along beneath the mat; all the binding was done by the upper cord. The orig. length of the mat was *c.* 3′ 7″; its breadth apparently 1′ 10″. The sides were neatly trimmed. $3' 2'' \times 1' 7'' \times \frac{1}{2}''$.

T. xiv. ii. 1. **Wedge cov.-tablet;** empty seal-case containing remains of plain silk fabric; point end broken. Blank. $4\frac{1}{2}'' \times 1\frac{5}{8}'' \times \frac{3}{4}''$.

T. xiv. ii. 001. **Ear-handle of lacquered wooden bowl.** Inside plain brownish red; handle brownish red, with bright red pattern of concentric circles with dot centres set between heavy single and thin double lines, and occasional dots; cf. T. xv. a. iii. 001. Well preserved. $3'' \times \frac{3}{4}'' \times \frac{1}{2}''$.

T. xiv. ii. 002. **Bundle of wooden writing slips,** blank, and shavings. Gr. length $6\frac{1}{2}''$.

T. xiv. ii. 003. **Mixed grain.**

T. xiv. ii. 004. **Fr. of brown silk fabric,** plain weave, and of hemp cord; both rotted. Gr. M. *c.* $2\frac{1}{2}''$.

T. xiv. ii. 005. **Wooden seal-case,** type C; see T. viii. 5. $1\frac{7}{8}'' \times 1\frac{1}{8}'' \times \frac{3}{8}''$.

T. xiv. iii. 17. **Wooden ink-seal;** small rectang. block, pierced transversely, having face $\frac{1}{2}''$ sq., on which in angular seal writing are cut two Chin. chars. 長壽 *ch'ang shou* = 'prolonged old age'. On back, R. side

occupied by char. apparently *shou*, 'old age', not fully completed. Cf. T. xxvii. 15. Finely cut. H. $\frac{5}{16}$". Pl. LIII.

T. xiv. iii. 58. Wooden peg, like T. 002, but very roughly shaped and painted; only one notch (below nose), top of head cut off. $7\frac{5}{8}" \times 1" \times c. \frac{3}{4}"$.

T. xiv. iii. 001. Wooden handle; straight; main portion sq. in section with bevelled edges. Thickens perpendicularly at one end and is pierced with a hole, in which is loop of string. Thickens horizontally at the other end, across which a groove has been cut $\frac{5}{8}$" deep and $\frac{1}{16}$" wide (outer rim split off); in this are traces of an iron blade wedged in with linen. Prob. handle of small adze. Length $9\frac{1}{2}$", width $\frac{3}{4}$" to 2", thickness $\frac{3}{4}$" to $1\frac{3}{16}$". Pl. LII.

T. xiv. iii. 002. Ear-handle of lacquered wooden bowl like T. vi. b. ii. 001; red inside, black elsewhere, with scroll pattern on outside in red. Length $3\frac{3}{4}$", h. $\frac{3}{4}$", width $\frac{1}{2}$".

T. xiv. iii. 003. Oval lacquered wooden bowl like T. vi. b. ii. 001; edges of both ends and one side missing; inside, red with black border; top of handles and outside black. Length *c.* 5", width *c.* 3" (with handles 4"), h. $1\frac{1}{4}$".

T. xiv. iii. 004. Half of wooden bowl with ear-handle like T. vi. b. ii. 001; not lacquered. Length 5", h. $1\frac{1}{4}$".

T. xiv. iii. 005. Part of wooden spatula with flat almost rectang. bowl, of which corners only are rounded; handle broken; much perished. Length (incomplete) $4\frac{1}{2}$", bowl $2\frac{1}{2}" \times 1\frac{3}{16}"$.

T. xiv. iii. 006. Wooden 'dead-eye' or pulley; cf. T. xiv. a. 004; string much perished. See N. xxix. ii. 001. b. Apex to base $2\frac{1}{4}$", base $2\frac{1}{4}$", diam. of stick *c.* $\frac{1}{2}$".

T. xiv. iii. 007. Wooden comb with round back; cf. L.A. viii. 001. H. $2\frac{7}{8}$", width $1\frac{7}{8}$", length of teeth $1\frac{3}{8}$", 4 teeth to $\frac{1}{2}$".

T. xiv. iii. 008. Twelve wooden writing-slips, uninscribed; three are bamboo. Gr. length 10".

T. xiv. iii. 009. Part of wooden spatula with flat oblong bowl; handle broken. Length 4" (of bowl 2"), gr. width $1\frac{1}{8}$".

T. xiv. iii. 0010. Three flat strips of cane forming a handle, with a knob of buff felt tied on to one end; possibly for applying flat washes of colour. Cane $4\frac{3}{4}" \times 1"$, knob diam. $\frac{5}{8}$".

T. xiv. iii. 0011. Child's heel-less shoe of coarse woollen fabric; dark brown, corded weave; made of one strip, the edges and ends turned over and sewn along sides; edges raw. Length 6", gr. width $2\frac{1}{2}$".

T. xiv. iii. 0012. Fr. of coarse woollen (?) fabric, canvas-like texture, yellowish in colour; prob. from lining of shoe. *c.* $6\frac{3}{4}" \times 3\frac{1}{2}"$.

T. xiv. iii. 0013. Irregular fr. of yellow-brown felt, prob. from shoe. Gr. M. $3\frac{1}{2}$".

T. xiv. iii. 0014. Fr. of pottery, wheel-made, of well-levigated grey-burning clay, kiln-fired and 'smothered'; surface deep black; marks on edge of two holes, prob. for rivets. Gr. M. $1\frac{1}{8}$".

T. xiv. iii. 0015. Oval string ring; made of two-ply cord, buff and brown, wound six times round and bound round with similar string; broken. Diam. of ring $1" \times \frac{5}{8}"$.

T. xiv. iii. 0016. Fr. of cane matting with curved edge, one side of end of ellipse; part of fan (?). Made of strips of cane *c.* $\frac{1}{16}$" wide; the perpendicular strips side by side, the horizontal $\frac{1}{4}$" to $\frac{1}{2}$" apart. Each perpendicular strip along the sides is bent across and becomes horizontal, each being carried $\frac{3}{4}$" to $\frac{1}{2}$" further up than the last outside neighbour before being bent, so that side has a slight curve. At the top, above last horizontal strip, they are bent round and carried across, twisting in and out with one another for a distance of between three to four strips, when each, as it comes to inside, is turned down and again becomes perpendicular. Only five horizontal strips are left. $9" \times 3\frac{1}{4}"$. Pl. LIV.

T. xiv. iii. 0017. Fabric frs. including:—1 piece blue silk; 1 piece brown silk; 4 pieces buff silk; 1 piece buff silk attached to a mass of felted wool; 2 pieces of buff silk knotted for tying; 1 piece buff linen (?) fabric; 1 piece red woollen braid; 1 piece string shoe sole. All very ragged. Gr. M. *c.* 8".

T. xiv. iii. 0018. Wooden beating stick of Chinese shape; blade pointed, and lozenge-shaped in section; handle round. Length of whole 20", of handle $7\frac{1}{2}$", blade $2" \times 1\frac{1}{4}"$, diam. handle $1\frac{1}{4}$". Pl. LII.

T. xiv. iii. 0020. Fr. of ivory, polished on one side, and showing traces of painted leaf scroll in green. $2\frac{1}{4}" \times 1\frac{1}{16}" \times \frac{1}{16}"$.

T. xiv. v. 001. Wooden bowl, turned on lathe, found containing coin deposit; simple basin shape with moulding below forming foot; 'chuck' marks on bottom; well preserved. Diam. $6\frac{3}{8}$", h. $3\frac{5}{8}$". Pl. LII.

T. xiv. v. 002. Wooden seal-case, type A; see T. viii. 5. Hole pierced through each end at right angles to grooves. $1\frac{9}{16}" \times 1\frac{5}{8}" \times \frac{5}{8}"$.

T. xiv. v. 003. Fabric frs., plain silk, 3 buff, 1 red, and 2 buff sewn to 2 blue; all very ragged. The two latter obviously from miniature banners, as a wooden strainer is inserted at the junction of two pieces. Gr. M. *c.* 6".

T. xiv. v. 004. Bead of gilt glass, flattened spheroid; cf. L.A. 00171. Diam. $\frac{3}{8}$".

T. xiv. v. 005-006. Two brass hair-pins with sq. top; wire round in section, except cross-piece, which is lozenge-shaped. Found together in bowl T. xiv. v. 001. Length $2\frac{7}{8}$" and $3\frac{5}{16}$", width $\frac{7}{16}$", diam. of wire $\frac{1}{16}$".

T. xiv. v. 007-008. Two rough pebbles, green in colour in parts. Gr. M. $\frac{3}{4}$".

T. xiv. v. 0011. a-c. Three frs. of silk fabric. (*a*) Small banner-top of faded mauve twill silk damask with wooden

stiffener and loop for hanging; pattern in larger twill, a flower arranged as palmette between two outward curling scrolls bound by cincture, which also holds adjoining curves of ogee stem scheme, on which the repeat is set off. (*b*) Fr. of fine buff twill silk damask forming part of small banner, with wooden stiffener attached; pattern, a variation of above, but smaller; upper part of each flower forms a trefoil. Attached to this, fr. similar to (*a*) but more loosely woven. (*a*) $5'' \times 2\frac{1}{2}''$; (*b*) $6'' \times 2''$. Pl. CXVII. (*c*) Frs. of very fine plain buff silk, formerly composing small temple banners, and containing remains of wooden stiffeners. Gr. M. $10\frac{1}{2}'' \times 3\frac{1}{2}''$.

T. xiv. vi. 001. Bowl end of wooden spoon; handle and bowl flat in front, rounded behind. Length $5\frac{3}{8}''$, of bowl $3''$, gr. width $1\frac{7}{8}''$.

T. xiv. vii. 001–002. Two frs. of rim and ear-handle of lacquered wooden bowls; cf. T. vi. b. ii. 001. 001 chocolate brown outside, red inside; 002 black, poor condition. Length $2\frac{3}{4}''$ and $1\frac{1}{2}''$, h. $\frac{3}{8}''$ and $\frac{1}{2}''$, width $\frac{1}{2}''$.

T. xiv. vii. 003–004. Two wooden seal-cases, type C; see T. viii. 5. 004 has ends rudely rounded, and sides of groove sloping to bottom; hole pierced through whole block lengthways beneath groove. *003*, $1\frac{7}{8}'' \times 1'' \times \frac{1}{2}''$; *004*, $2\frac{3}{16}'' \times 1'' \times \frac{9}{16}''$.

T. xiv. vii. 005. Fr. of wooden knife-sheath; top end and one side broken away. Oval in section; $\frac{3}{4}''$ from tip, level slightly sunk as if to allow for leather (?) casing; inside very rough; fr. of silk fabric rammed down at bottom of inside. $3\frac{1}{8}'' \times \frac{7}{8}'' \times \frac{7}{16}''$.

T. xiv. vii. 006. Fr. of piece of wooden furniture (?). Straight main-piece, oblong in section, with round tenon at each end. Each tenon pierced with pin-hole (parallel to narrow sides of main-piece), in one of which remains pin broken short. Through narrow sides of main-piece is a mortice in which the tenon of a flat cross-piece is still held by wooden pin. Traces of red paint. Main-piece $4\frac{1}{8}'' \times \frac{3}{4}'' \times \frac{5}{8}''$, tenons $1\frac{3}{8}'' \times \frac{7}{16}''$, cross-piece $6\frac{1}{4}'' \times \frac{7}{8}'' \times \frac{1}{4}''$.

T. xiv. vii. 007. Two small frs. of faded yellow and red silk fabric. The red is an irregular strip, but yellow was a square of *c.* $3\frac{1}{2}''$ with folded edges, one of which is gathered by a piece of string run through. Fine slightly corded weave; ragged. Gr. M. $3\frac{1}{2}''$.

T. xiv. viii. 001. Half of wooden seal-case, type A; see T. viii. 5. $1\frac{7}{8}'' \times \frac{7}{8}'' \times \frac{5}{8}''$.

OBJECTS EXCAVATED AT WATCH-STATION T. XIV. A

T. xiv. a. 001. Woven string shoe, man's (hemp?). The upper appears to be woven in one piece, and was perhaps worked round a last to get shape of heel. The upper part covering the toes was woven continuously with the side, but flat; afterwards being turned up and joined to the sides. A strengthening piece at back of heel, inside, seems to have been similarly made. The sole is of thicker string than that used in upper. A cord used to fasten the shoe is attached to each side at about mid-ankle, and fastened to this cord is a piece of finely-woven canvas, strengthened by string stitched regularly throughout its length in lines almost close together. All the work is extremely regular and good. Well preserved. Length $11''$, breadth $4\frac{1}{4}''$ to $2\frac{1}{4}''$.

T. xiv. a. 002. Woven string sandal, hemp (?). Ten 'ends' of thick cord extend along length of sole. Into these is woven a close weft of very thin string, which passes under and over alternately. At the toe end the ten 'ends' seem to be brought together into two bunches of five, and the weft runs alternately over and under each bunch of five. The two centre 'ends' are produced about $3''$ beyond the others, and are woven together by the weft, and these two 'ends', being formed of one piece, terminate in a loop. The arrangement at heel is very similar, but not so elongated. At a distance of about $2''$ from the heel, four loops are attached to each edge of the sole; several other loops appear on each side towards the toes and round the toe end of sole. A double cord, passing horizontally through the system of heel loops, presents two loops projecting forward from each set of four. A separate string passed through all these loops would lace the sandal firmly to the foot. General resemblance to modern 'grass shoe' of Kashmīr. Fairly well preserved. Length $1'$, width *c.* $4\frac{1}{2}''$. Pl. LIV.

T. xiv. a. 003. Oblong wooden block; edges slightly bevelled. Prob. for die or seal; cf. T. xii. a. ii. 005; xxviii. d–q. $1'' \times \frac{9}{16}'' \times \frac{5}{16}''$.

T. xiv. a. 004. Wooden 'dead-eye', as T. xiv. iii. 006; ends tied by string, of which knotted ends remain in grooves. Diam. of stick $\frac{1}{2}''$ to $\frac{1}{4}''$, across base $2''$, apex to base $2''$.

T. xiv. a. 005. Flat arched wooden handle, lacquered black. Width $1\frac{3}{8}''$, thickness $\frac{3}{16}''$, span $4\frac{1}{4}''$.

T. xiv. a. 006. Part of lacquered wooden bowl, like T. vi. b. ii. 001, but larger; black outside, red inside; condition bad. Gr. M. $5\frac{3}{4}''$.

T. xiv. a. 007. Bronze arrow-head, elongated variant of triangular type T. 007; good condition. Length $1\frac{5}{8}''$. Pl. LIII.

T. xiv. a. 008. Fr. of bronze mirror (?); part of foliage design on back. Gr. M. $\frac{5}{8}''$.

T. xiv. a. i. 001. Clay sealing, $1\frac{1}{8}''$ sq., containing four Chin. chars. in angular seal writing, 董褒印信 *Tung pao yin-hsin*, 'Seal of the Tung frontier-district', where 褒 stands for modern 堡 (Mr. Hopkins). Cf. T. xxvii. 15. Marks of accidental burning on edges and under surface. Well preserved. H. $\frac{3}{8}''$. Pl. LIII.

T. xiv. a. i. 002. Fabric frs., including a tangled bundle of fine hemp (?) string; a strip of light buff silk, fine plain

weave; and a fr. of fine exceedingly close-woven dark blue silk, with a pin stripe in buff recurring at intervals of $\frac{1}{8}''$. This fabric shows at the selvedge a strip of light brown, and is sewn on one side to silk of bright red; on the other to silk of light buff, frs. of which remain; sand-encrusted. *c.* $3\frac{1}{2}'' \times 3''$.

T. xiv. a. ii. 001. Wooden hoe. Wedge-shaped head with edge worn with use; handle a stick, oval in section, with red-brown smooth bark and close-grained wood resembling cherry; fastened to head by means of wedge driven tight into end. Head $11'' \times 4\frac{1}{2}'' \times 1\frac{3}{4}''$ to $\frac{3}{4}''$, handle $1'7'' \times 1\frac{1}{4}'' \times \frac{7}{8}''$. Pl. LII.

OBJECTS FOUND UNDER DÉBRIS AT WATCH-TOWER T. XV

T. xv. 1. Neck and rim of pottery jar, wheel-made, of slaty grey-burning clay, hard kiln-fired. Rim sharply everted and capped by secondary ring, giving on the outside a slightly concave bevel to extreme edge; on inside, sharp cavetto, distinguishing it from curve of rim proper. In the top rim and down the bevelled outer edge, four notches (made after firing) to take strings crossing mouth at right angles and securing stopper. Cf. T. xvi. 1. Diam. 5″.

T. xv. 001–003. Three wooden knobs as T. xii. 0015; sq. in section below, painted black or red. Gr. length $2\frac{1}{2}''$, gr. diam. $\frac{13}{16}''$ sq.

T. xv. 004. Hoe-blade of cast iron, socketed to take wedge-shaped end of wooden shaft full width of blade (socket $6\frac{5}{8}'' \times \frac{3}{8}''$). Sides rounded off at corners to working edge; one end ground down by use. $6\frac{3}{4}'' \times 1\frac{5}{8}''$; metal at top $\frac{1}{16}''$ thick; total width $\frac{1}{2}''$. Pl. LIV.

T. xv. 005. Five frs. of iron from old matchlock, found near steps leading up to top of watch-tower; tied up in a bundle with string; probably dropped by some hunter while watching from ruin for wild camels. Gr. length 5″.

T. xv. 006. Woven string shoe, hemp; type of T. xviii. iii. 001, with the toe forming upturned point. Edge of opening bound with leather; part of heel lost. Length 11″, gr. width $4\frac{3}{4}''$. Pl. LIV.

T. xv. 007. Three frs. from edge of woollen pile carpet; double warp (back and front) of goat's hair (?) yarn, on which the red and yellow wool is wound and knotted, forming pile on either side. The weft is of finer buff woollen yarn, and appears to gather the warp threads together in groups of four pairs (back and front), interwoven in a species of 'wrapped-twined' weave. Gr. fr. $3'' \times 1\frac{1}{4}''$. Pl. XLIX.

T. xv. 008. Bronze arrow-head; general type of T. 007, but head longer and narrower, while the angles end in true barbs; depressions in all three sides. Cf. T. xxviii. 0012. Length $1\frac{1}{2}''$.

T. xv. 009. Fr. of iron spade or hoe, consisting of socket and upper part of blade; cast in a mould, as the indications of the joint down the sides evidence. Construction admirable; the wedge-shaped socket is, on the outside, $3\frac{1}{2}''$ long, 2″ tapering to $1\frac{3}{4}''$ on the broad face, 1″–0 on the narrow face; the blade springs from the sides of the socket $1\frac{3}{4}''$ from the broad end, and its rounded shoulders are edged by a thickening of the metal; the socket extends $1\frac{3}{4}''$ down the blade, giving great strength. Width of blade at widest part is $3\frac{3}{4}''$. Well preserved. $4\frac{1}{8}'' \times 3\frac{3}{4}''$. Pl. LIV.

T. xv. 0010. Spade or mattock-blade of welded iron; shape almost sq., but with concave sides widening slightly to socket; corners of working edge rounded off. The two sheets of metal welded together about half-way down blade, then opening above to receive wedge-shaped end of wooden shaft; ends open; at each upper corner, hole for iron rivet through wood and metal, one remaining, $\frac{3}{4}''$ long. Depth $5\frac{1}{4}''$, width $4\frac{3}{4}''$ to $5\frac{3}{8}''$, thickness $\frac{1}{16}''$ to $\frac{3}{4}''$ (open end). Pl. LIV.

T. xv. 0011. Strip of red silk fabric, fine corded weave, worn. Length 6″.

OBJECTS EXCAVATED FROM REFUSE-HEAPS OF STATION T. XV. A

T. xv. a. 001. Wooden seal-case; cf. type A, T. viii. 5. No string grooves, but three string holes pierced level with bottom of cavity, two on one side and third opposite. These $\frac{1}{4}''$ diam. Seal-cavity $1\frac{1}{4}'' \times 1\frac{1}{4}'' \times \frac{3}{4}''$; seal-case $2\frac{3}{16}'' \times 1\frac{7}{8}'' \times 1\frac{1}{4}''$. Pl. LIII.

T. xv. a. 002. a. Two pieces of figured silk with pattern in rich yellow on blue ground. A double row of rectangular billets, space between billets in each row being about twice the width of billet itself, and billets of one row occurring opposite space in row above, alternate with rows of thin angular meanders variously grouped in one, two, and four parallel bands with two small spots in each hollow. Part of band of skeleton billets occurs composed of elongated octagons in outline, each enclosing two parallel lines lying in direction of length of octagon. [*Note.* This type appears also among silk fabrics from L.C. site, Lou-lan, excavated 1914.] Larger piece $1\frac{7}{8}'' \times 1''$. Pl. LV.

T. xv. a. 003. Fabric frs., including:—14 pieces of silk fabric, buff or light brown (very ragged); 1 piece dark blue silk; 3 pieces faded blue silk and 2 frs. loose felt. Gr. M. 1′.

T. xv. a. i. 3. Two strips of fawn-coloured silk, plain weave, much worn. The longer, torn at each end, shows by one end impress of seal in black, much effaced. The shorter has selvedge at one end, and shows by this, on one side, impress of seal and three or four Chin. chars.; on the other side one l. Chin. chars. See Chavannes, *Documents*

chinois, No. 539, Pl. XV, and above, pp. 700 sq. Lengths 19·7″ (50 cm.) and $12\frac{1}{4}''$ (31 cm.), widths $1\frac{1}{4}''$ to $1\frac{5}{8}''$.

T. xv. a. i. 001. Fr. of lacquered wooden bowl, like T. vi. b. ii. 001, with part of edge; outside black; inside red with black strip round edge. Gr. M. 3″.

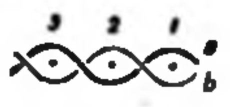
T. xv. a. i. 002. Wooden seal-case, type A; see T. viii. 5. $1\frac{15}{16}'' \times 1\frac{5}{8}'' \times \frac{5}{8}''$.

T. xv. a. i. 003. Wooden stopper (?), in shape of mushroom with thick stalk; curve of top done by rude bevelling. H. $1\frac{1}{8}''$, diam. $1\frac{3}{8}''$, of stalk $1\frac{1}{8}''$.

T. xv. a. i. 004. Wooden spoon with rounded flat bowl; handle broken. Length $5\frac{3}{8}''$ (of bowl $2\frac{1}{2}''$), gr. width $1\frac{3}{4}''$.

T. xv. a. i. 005. Part of bottom of lacquered wooden bowl, like T. vi. b. ii. 001. Black outside, red inside, but lacquer mostly perished. Gr. M. 3″.

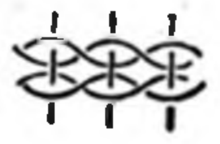
T. xv. a. i. 006. Fr. of shoe of buff cotton (?) fabric and silk brocade; outer sole and toe missing. Uppers consist of outer fabric and a lining, the outer material being of cotton and apparently woven with a fine warp of a coarser and more perishable fibre; the use of this particular fibre seems common to the shoemaker. The weaving seems to be done with two shuttles at once, one shuttle passing under and the other over each 'end' of warp; between each stitch the shuttle threads are twisted together by one turn (technically termed 'wrapped-twined' weave). So, in section, (*a*) passes behind the warp thread 1, (*b*) passes in front; (*a*) is brought through to the front and (*b*) passes to the back, lying above (*a*); (*b*) encircles 2 and is brought to the front, (*a*) encircles 2 and passes to back, lying over (*b*), thus reversing the previous order. Succeeding shoots are the same.



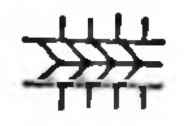
Section

Elevation

The whole upper is woven to shape, the upper end of warp being gathered round the opening of the shoe, and the direction of the weft being changed to form instep. Round edge adjoining sole is inwoven band of blue, the rest being buff. Texture extremely close and fine. The edge of the opening is thickly padded with soft long fibre resembling that of the palm, but perhaps birch or willow, and this is covered with a silk material figured in blue and white (?) sewn to the pad with an evenly twisted white cord, which forms a kind of cable braid in two parallel lines $\frac{3}{8}''$ apart. This silk fabric is much perished, but seems similar in type to T. xxii. c. 0010 (*a*). The lining is also woven to shape, but is much coarser in texture; the warp is a thin hemp string and the weft a thread made of the same fibre as that used for the padding. The weave for sole part resembles that already described for the outer shoe; but the sides have the contiguous rows reversed in the twist, giving a neat zigzag mesh, shown in diagrammatic form (*a*), in actual form (*b*). [*b* is by mistake sketched the reverse way.]



a



b

On the sole portion of lining, five strips of padding are introduced, the fibre covered with silk yarn, dark blue, white, and yellow. The lining is attached to the outer shoe at the opening. The whole shoe shows great skill and high development. Much tattered and very brittle in places. Length (incomplete) 8″, width apparently *c.* 4″. Pl. LIV.

T. xv. a. i. 007. Bronze arrow-head, type of T. xv. 008; depression only in one side; tang of bronze extends $\frac{7}{8}''$. Good condition. Length $1\frac{1}{2}''$. Pl. LIII.

T. xv. a. i. 008. Oats, specimen of.

T. xv. a. i. 009. Game-trap, formed of stout ring of fibre wound round and round with twisted rope of same; through this, from outside, sixteen wooden teeth are driven at an angle, so as almost to meet at a point *c.* 1″ below plane of ring. The teeth are secured by their ends being split and a wedge driven into the slit. The trap was prob. used as similar traps are used in Africa at this day; the ring is placed over a hole in the ground with a noose over it, the end of which is attached to a tree or stake. The animal on putting its foot into the ring attempts to shake it off and so pulls the noose tight. [Information supplied by Mr. T. A. Joyce.] See T. 0018. Diam. outer 6″, inner 4″, length of teeth $1\frac{1}{2}''$ to 2″. Pl. LIV.

T. xv. a. ii. 001. Fr. of lacquered wooden bowl, prob. similar to T. vi. b. ii. 001; no pattern; red inside, black outside; well preserved. Length $4\frac{3}{8}''$, h. $1\frac{1}{2}''$.

T. xv. a. ii. 002. Oblong piece of wood, with two string grooves sawed across to half depth of wood; upper part of ridges broken away. Perhaps ordinary seal-case, type A; see T. viii. 5. Mud in grooves. $1\frac{11}{16}'' \times 1\frac{3}{8}'' \times \frac{7}{16}''$.

T. xv. a. ii. 003. Ear-handle of lacquered wooden bowl, like T. vi. b. ii. 001. Surface of inside red; handle black, but on outside has pattern in red; condition fair. Length 3″, depth 1″, width $\frac{7}{16}''$.

T. xv. a. ii. 004. Half of ear-handle of lacquered wooden bowl, like T. vi. b. ii. 001. Inner surface red, outer black; condition good. Length $1\frac{3}{4}''$, width $\frac{1}{2}''$, depth $\frac{3}{8}''$.

T. xv. a. ii. 005. Wooden seal-case, type C; see T. viii. 5. Slip of wood wedged across bottom of groove as in T. xii. a. 0018. $1\frac{5}{8}'' \times 1'' \times \frac{7}{16}''$. Pl. LIII.

T. xv. a. ii. 006. Thin strip of lacquered wood; red one side, black on other. $2\frac{1}{4}'' \times \frac{15}{16}'' \times \frac{1}{16}''$.

T. xv. a. ii. 007. Wooden comb, with arched back like L.A. vi. ii. 0013. $3'' \times 2\frac{1}{8}'' \times \frac{5}{16}''$, h. of teeth $1\frac{3}{8}''$, nine teeth to $\frac{1}{2}''$.

T. xv. a. iii. 57. Two strips of fine silk, undyed, light buff, plain weave; one (the longer) inscr. at one end with one l. Upright Brāhmī chars. For M. Boyer's decipherment see above, pp. 701 sqq. Inscr. strip, though

torn in places, retains selvedge at either end, showing breadth of silk as woven to be 19½" (49·3 cm.). Uninscr. strip hemmed one end, torn off at other; length 13⅛". Widths respectively 1⅝" and 1⅞". Pl. XXXIX.

T. xv. a. iii. 001. Ear-handle and part of side of lacquered wooden bowl; lacquer much perished; pattern identical with T. xiv. ii. 001 (q. v.). 3½" × ⅝" × ⅝".

T. xv. a. iii. 002-003. Two wooden seal-cases, type C; see T. viii. 5. *002*, 2 3/16" × 1" × 7/16" to 5/16"; *003*, 1 11/16" × ⅝" × ½".

T. xv. a. iii. 004. Wooden spoon, of which (broken) handle meets flat bowl at angle of *c.* 150°; chip off bowl. Length 5¼" (of bowl 2⅛"), gr. width 1⅝".

T. xv. a. iii. 005. Six wooden writing slips, blank. Length *c.* 9½".

T. xv. a. iii. 006. Wooden pen made of stick trimmed to a sharp point. Length 6¾".

T. xv. a. iii. 007. Wooden peg; small variant of T. 002 (q. v.). Ink much faded; one notch to mark nose; forehead bevelled off; eyes (circles round dots), eyebrows (one horizontal line), hair (one horizontal line), and beard (two short perpendicular lines). 5½ × ¾" × ⅜".

T. xv. a. iii. 008. Wooden arrow-head (?), carved in one piece with shaft. Shape not found in metal. Rather larger in circumference than shaft, the shank tapers to junction of point proper; it has six faces: three upper faces continue unbroken down the point; two below these, splaying outwards and narrowing down, disappear into angles of two flanges of the point; lowest face broadens out to full width of the point between its flanges, but is distinguished from the point proper by a sharp offset. The point is therefore flat below, and has a rounded upper surface actually composed of five facets. Length of point proper 1¾", breadth ½"; of whole head 2⅞"; of shank 9/16"; shaft diam. ⅜"; broken at 2½". Pl. LIII.

T. xv. a. iii. 009. Ear-handle of lacquered wooden bowl, like T. vi. b. ii. 001; red over black inside and out; bad condition. Bowl had been broken and mended with string; two holes near bottom edge of fr. with string in them. 3½" × ⅞" × ½".

T. xv. a. iii. 0010. a. Fr. of silk fabric, in blue and buff of at least two tones. A boldly curving meander of blue carries double band of cloud scrolls, from hollow of which proceed four parallel lines in direction of warp, the outer two broader than inner pair, suggesting column. Pattern very fragmentary, but sufficient remains to class it definitely with that of Ch. 00118 (Pl. CXI). Technique of weaving very complicated and difficult to follow, owing to much of surface having perished, but angular or 'stepped' character is clearly shown. 7" × 4". Pl. LV.

T. xv. a. iii. 0010. b-d. Fabric frs., including (*b*) 3 pieces of buff silk fabric, very ragged; (*c*) 1 piece of blue silk fabric sewn to fr. of felt; (*d*) 1 piece of blue silk fabric sewn to fr. of brown. Gr. M. 1′ 2″.

T. xv. a. v. 001. Two wooden writing-slips, blank. Length 6½" and 9".

T. xv. a. v. 002. Fr. of reed arrow-shaft. Rather more than half is lacquered black; marks of binding in remains of lacquer; charred slightly at lacquered end, cut sq. at other. Cf. T. xix. i. 006. Length 6", diam. 5/16".

T. xv. a. v. 003. Fabric frs., including:—4 pieces of red silk; 1 piece of buff silk; 2 pieces of red silk twisted and knotted into cord; 1 piece of buff hemp or cotton fabric. Gr. M. *c.* 8".

T. xv. a. v. 004. Lacquered wooden bowl, ear-handle and part of side of, like T. vi. b. ii. 001; handle black; outside of bowl black; inside red. Handle, h. ½", projection ⅝", length (about half) 2⅛".

T. xv. a. v. 005. Wooden seal-case, type C; see T. viii. 5. 1⅝" × 11/16" × ½". Pl. LIII.

T. xv. a. v. 006. Flat piece of wood, of which one side ends in very gradual bevel; has been lacquered black on flat side and red on bevelled side. 1⅞" × 1¼" × 3/16".

T. xv. a. vi. 001. Frs. of reed arrows, tied up in a bundle with coarse string. Remains of two or three arrows of type of T. xix. i. 006; feathers preserved on two; one bronze arrow-head, type of T. 007, tang broken off. Probably bundle of broken arrows sent 'into store' for replacement. Length of bundle 6". Pl. LIII.

OBJECTS EXCAVATED AT WATCH-TOWER T. XVI

T. xvi. 1. Neck and rim of pottery jar, wheel-made, of grey-burning clay, hard kiln-fired. Rim sharply everted and rolled below, capped by pointed ring giving on outside a marked concave bevel to extreme edge and inside not differentiated from curve of rim proper. Has been used with a stopper, the strings for securing which have left worn marks on rim. Cf. T. xv. 1. Diam. 4⅛".

T. xvi. 001. Fabric frs., very ragged, consisting of plain buff and blue silk and handful of raw silk. [Analysed by Dr. Hanausek.] Gr. M. *c.* 1′ 3″.

T. xvi. ii. 001. Wooden seal-case, type C; see T. viii. 5. Half clay of seal remains and part of string, which also projects through hole in one end. 1 9/16" × 1⅜" × 9/16". Pl. LIII.

OBJECTS EXCAVATED AT WATCH-TOWERS T. XVII AND T. XVII. A

T. XVII. 001. Horn spoon, roughly made; partly decayed. Length 6¼". Pl. LIII.

T. XVII. 002–004. Three wooden seal-cases; 002 and 003 type C, 004 type A; see T. VIII. 5. 003 retains string turned twice round, knotted and hanging free to length of 7". *002* (largest) 2" × 1½" × 15/16".

T. XVII. 005. Fr. of basket-work, prob. heel part of grass shoe; warp of hemp, weft grass; weave 'wrapped-twined'. 7" × 4".

T. XVII. 006. Fabric frs., including:—one fr. of loosely woven white fabric made prob. of fibre of *Broussonetia papyrifera* (see T. VI. b. i. 0013; analysed by Dr. Hanausek), one fr. of red silk, and one fr. of grey-black silk, plain weave. Gr. M. 9".

T. XVII. 007. Wooden fish-hook, cut from forked twig; regular primitive harpoon type; top of stem notched and piece of two-ply string fastened round notch. Length 4½", length of barb 1¾". Pl. LIII.

T. XVII. a. 001. Iron spear-point, two-edged, with hollow socketed shank; blade has marked shoulders and almost straight edges; section diamond-shaped. Point 4" × 7/16" × ⅜", shank 2" × ¾" diam. Pl. LIII.

OBJECTS EXCAVATED AT, OR FOUND NEAR, THE RUINED MAGAZINE T. XVIII

T. XVIII. (?) 001. Bronze belt-catch, cast. Long loop-ring for end of leather thong; on outside, lion's head, from the mouth of which issues a long tang, bending back, and then turning forwards at right angles, and ending in a round button whereon is monkey's head; this to pass through metal ring on other end of belt. Length 2¼". Pl. LIII.

T. XVIII. (?) 002. Fr. of ragged buff silk fabric, plain weave. *c.* 10" × 7".

T. XVIII. 003. Two frs. of porcelain from same vessel, painted in blue under a greyish white glaze; rough floral pattern outside, on inner rim border of dots above double line. Same ware as T. XI. 0010. Chinese. Gr. M. 1¼".

T. XVIII. i. 001. Wooden peg, as T. 002, etc., but without notches, and drawing in black and red much effaced; top broken where a hole was drilled half-way through (diam. ⅜"). 8¼" × 1¼" × ¾".

T. XVIII. i. 002. Wooden writing slip, blank: end broken. Length 6¼".

T. XVIII. ii. 9. a–b. (*a*) **Wooden block,** roughly oblong, split with grain of wood; only one side smoothed; on this, traces of ink drawing or Chin. chars. With it an iron skewer (*b*) with ring at blunt end; as T. XII. a. 0026; much corroded. (*a*) 7¼" × 2" × ¼"; (*b*) length of whole 4¾", of pin 3⅞", gr. width of pin ¼".

T. XVIII. ii. 10. Segment of round wooden beam, with inscription (two Chin. letters) reading 'Southern Buddha' (?), in black. 6½" × 3" × 2¾".

T. XVIII. iii. 001. Woven string shoe, made on last. Sole similar to T. VI. b. i. 0011; warp of uppers two-ply, weft of finer twine in plain weave, giving corded effect. Manipulation of warp at toe to achieve shape is interesting. Edge well finished and originally covered with soft kid leather; toe worn away, hole at heel. Length 8¼", gr. width 3⅞".

T. XVIII. iii. 002. Woven string shoe, small size, of same type as T. VI. b. i. 0011. Loop of tightly coiled string fastened lengthways into upper surface of toe-piece; sole studded with knots; toe worn through, otherwise in excellent condition. Length 8", gr. width 3⅛".

T. XVIII. iii. 003. Wooden counter or die (?). Block, tip-cat shaped, sq. in section across middle and with both ends cut to a four-sided point; on the sides are burns made by hot wire, irregular and seemingly on no system. Perhaps a piece in some game; cf. T. XXVIII. c. Hard wood, smooth surface. Length 1", section in middle ⅝" sq. Pl. LIII.

T. XVIII. iii. 004. Bronze arrow-head; type T. 007. Much corroded. Length 1⅛".

OBJECTS EXCAVATED AT RUINED WATCH-TOWER T. XIX

T. XIX. 001. Rude oblong piece of wood; on one side, insufficiently smoothed, very crude drawing of a face (?). Cf. T. XXVIII. 35. 4¾" × 1¼ × ½".

T. XIX. 002. Fabric frs., including:—one fr. of light buff silk fabric, a strip of red silk fabric, and two frs. of indigo silk fabric. The light red and the buff are of firm even plain weave, the indigo of fine ribbed weave. Gr. fr. (light red) 1' 11½" × 2½".

T. XIX. 003. Strong hemp string, two-ply, coiled in figure of eight and tied round middle; one end of coil abraded. Diam. of string *c.* ⅛", coil 3½" × 1¼".

T. XIX. 004. Chopped reed straw, specimen of.

T. XIX. i. 6. Reed arrow-shaft; cf. T. XIX. i. 006. Lacquered part shows marks of feathers and binding; at end lacquer has been trimmed away as if for some subsequent purpose. Length 9", diam. 5/16".

T. XIX. i. 001. Wooden seal-case, type C; see T. VIII. 5. Roughly cut. 1½" × 1¼ × ¾".

T. XIX. i. 002. Flat wooden spoon-shaped trowel; end of handle charred; on blade, mud and chopped straw. Prob. builder's trowel. 11" × 1⅞" (gr. width of blade) to ⅝" × ¼" to ½".

T. xix. i. 003. Wooden instrument, incomplete (a smoother?). Thick handle with projecting flange behind to give grip to little finger; top shaved down in curve to take pressure of thumb; this curve continues along blade, compensated for by projection of blade on under side beyond handle. Blade flat below, worn on R. side, 3" long (broken off) × 1". Very hard wood much polished by use. Gr. length 7½", gr. width 2¾", gr. thickness 1½". Pl. LII.

T. xix. i. 004. Wooden seal-case, type C; see T. viii. 5. Hole through one end. 1⅝" × ¾" × ½".

T. xix. i. 005. Arrow. Iron tang broken at length of 3⅛"; bronze head, type of T. xv. 008, with triangular hollow in each face; sharp; good condition. Length of head 1⅝", of whole 4⅞". Pl. LIII.

T. xix. i. 006–007. Two reed arrow-shafts. Three feathers, bound on with very thin thread wound spirally and secured with lacquer. Near the end on either side a wedge-shaped piece ½" long was cut out of the shaft, and two slips of cane were gummed in and bound round with the thread that held feathers, so that they projected beyond butt of arrow, splaying out and forming a spring-notch; probably ends of the feathers were bound into wedge incision; below these cane shoulders.

006 has one fr. of cane notch-shoulder, and part of one feather preserved, with lacquer and traces of binding; other end of shaft burned and broken. From 007 all feathers and both notch-shoulders are missing. Cf. M. ii. 001. Lengths 9½" and 1'; diams. $\frac{5}{16}$" and ⅜". Pl. LIII.

T. xix. ii. 001. Wooden seal-case, type A; see T. viii. 5. Hole through bottom. 2" × 1⅞" × $\frac{7}{16}$". Pl. LIII.

OBJECTS EXCAVATED AT WATCH-TOWERS T. XX AND T. XXI

T. xx. 002. Bronze ring, round in section. Inside diam. ½", outside ¾".

T. xx. i. 001. Wooden block, with three grooves sawn across;—a seal-case in the making, but hole not yet gouged out. 1¾" × 1$\frac{7}{16}$" × ⅝".

T. xx. i. 002. Burnisher of wood and bone (?). Stout wooden peg tapering slightly towards flat-cut end. Round other end a bone ring, 1⅛" wide and ⅛" thick, is fastened by four black-headed pins, peg being thinned down so that surface of bone is flush with that of rest of peg. The pins are set round end of ring adjoining wood; and four others set round the other end fasten on a neatly bevelled plug of brown horn which fills this end. Through middle of ring a hole is bored from side to side, through wood and bone, $\frac{3}{16}$" in diam. Apparently a burnisher, the wooden handle having subsequently been roughly trimmed down as if to fit on another handle now missing. Cf. *Ancient Khotan*, i. p. 397, N. vii. 2. Length 6¾", gr. diam. $\frac{15}{16}$".

T. xx. i. 003. Bronze ring, plain, to which doubled strip of faded yellow silk is knotted. Diam. of ring $\frac{9}{16}$", thickness ⅛".

T. xxi. 001. Bundle of reed straw, specimen of.

T. xxi. 002. Bundle of straw, specimen of.

OBJECTS EXCAVATED AT WATCH-TOWERS T. XXII. A–C AND T. XXIII. A

T. xxii. a. 001. Bundle of reed straw, specimen of.

T. xxii. b. 001. Ear-handle of lacquered wooden bowl, like T. vi. b. ii. 001; red. 4¾" × ⅞" × ⅝".

T. xxii. c. 001. Stout ring of string, bound round like T. xiv. iii. 0015. Diam. of ring 1", of string ⅛". With it two tangles of string (two-ply). Diam. *c.* $\frac{1}{16}$".

T. xxii. c. 002. Fr. of coarse woollen fabric; string-like woof on double warp; buff with occasional line of dark brown. 7½" × 5".

T. xxii. c. 003. Two pieces of thin buff leather (like wash-leather), run together with string. Both much torn. Gr. M. 9".

T. xxii. c. 004. Fr. of loosely woven buff fabric; perhaps of same fibre as T. vi. b. i. 0013 (q. v.). Gr. M. 8".

T. xxii. c. 005. Strip of buff silk fabric, plain weave, one end knotted. 9" × 3¼".

T. xxii. c. 006. Narrow leather strap, with hole 1⅝" from one end. Broken each end, once stained black on both sides. 8¾" × $\frac{7}{16}$" × $\frac{1}{10}$".

T. xxii. c. 007. Fabric frs., all plain silk, ragged, including:—three frs. of buff (one knotted), two strips of fine blue, one fr. of pale green sewn to buff, one fr. of maroon, and one of deep green. Gr. length (buff) 1' 3".

T. xxii. c. 008. Fabric frs., all plain silk, including:—one piece dark brown silk twisted and sewn into a cord, 27" × $\frac{3}{16}$", one piece pale green silk, seven pieces buff (one knotted), and one piece each of brown, grey, and blue; bad condition. Gr. M. *c.* 1' 1".

T. xxii. c. 009. Two frs. of cotton (?) fabric, one grey-brown, the other red; plain coarse weave. [Not analysed.] Gr. M. 5".

T. xxii. c. 0010. a. Strips of roughly joined figured silk in indigo and yellow-green. Pattern: 'all-over repeat' set out upon lines crossing the material diagonally at equal intervals, at angles of 45° R. and L., resulting in squares placed diamond-wise. At junctions of lines, a highly conventional scroll pattern gives effect of a rosette. The lines are double, and on inner side are furnished with closely placed hook-shaped lines, a simplification of the 'latch-hook' border. The alternate rows of squares are different in pattern.

Row (*a*):—In centre of square, a very conventional tree of quasi-Gothic type; and round it, but well separated from it and near lines of square, four birds in profile, facing each other in pairs in one direction, but foot to foot in other. Large crested head reverted, wing lifted horizontally, rather short flamboyant tail, thick, quickly tapering leg, and three-toed claw. The pattern is a 'turn-over' in both directions.

Row (*b*):—In centre a ring of six diamond shapes representing a tree or bush. To one side of this two spotted dragons, bisymmetrically disposed, issue R. and L. from a band which joins their scrolled tails, and appear to threaten with open jaws and uplifted paws two highly conventional birds (phoenixes), which occupy the other side of the bush.

The pattern is woven so that it is upright across width, i. e. in direction of weft. This does not matter much in such a very conventional treatment. It is possible that the dragon pattern is upright in the length of the fabric.

Weaving is very fine in texture, and detail of pattern small. The angular, geometrical treatment of some of the details, such as the squared volutes of wing feathers of phoenix, quite unnecessary in so fine a material, suggests adoption from a fabric of larger texture. The same peculiarity of preserving angularity for its own sake is observable in a small fragment attached to strips already described, but of different pattern. It is very threadbare, but the pattern (incompletely shown in the fr.) seems to consist of a conventional tree, placed alternately upwards and downwards regularly all over the material.

The whole is a good deal worn, and is made up of about eleven small pieces. Attached to back and upper edge of front are pieces of plain silk, red and yellow.

9" × 7". Pl. LV and (design drawn out) CXVIII.

T. xxii. c. 0010. b. Fabric frs., all plain silk, including one piece each of red, buff, and yellow, and sand-encrusted frs. of blue, buff, and red sewn to fr. of felt. Gr. M. 1' 2".

T. xxiii. a. 001. Wooden 'dead-eye' or pulley; stick warped and bent over into a loop of which the two ends are tied tightly together with several twists of stout cord in groove. Cf. N. xxix. ii. 001. b. Length of loop $3\frac{3}{8}$", width $1\frac{1}{4}$", diam. of stick $\frac{5}{16}$".

T. xxiii. a. 002. Fr. of coarse cotton fabric. [Analysed by Dr. Hanausek.] *c.* $5\frac{1}{4}$" × $3\frac{3}{8}$".

OBJECTS EXCAVATED AT WATCH-TOWERS T. XXVI AND T. XXVII

T. xxvi. 001. Wooden knob resembling T. xii. 0015, but smaller, and head more conical; was painted black all over. $1\frac{1}{2}$" × $\frac{5}{8}$" × $\frac{3}{4}$".

T. xxvi. 002. Woven string shoe; made of hemp string bleached by exposure; heel gone and toe worn through. Sole similar to T. vi. b. i. 009, but the knots are not evenly disposed. They are clustered under heel and toe, and spaced into transverse rows under centre, while a double row along edges connects toe and heel groups. Warp of uppers is horizontal, and must have been stretched on some kind of last as a loom to get the diminishing circumference of the successive 'ends'. Weft is 'wrapped-twined' with alternate R. and L. wrap, skilfully woven to shape of last. Rotted. Length (incomplete) $6\frac{1}{2}$", width $3\frac{1}{2}$".

T. xxvi–xxviii. 001. Strip of wood, oblong in section, split down most of length as if for making into writing slips, but abandoned because split came out to edge. $9\frac{1}{4}$" × $\frac{5}{16}$" × $\frac{3}{16}$".

T. xxvii. 1. Fr. from rim of stoneware bowl, T. xxvii. 5 (q. v.). Gr. M. $2\frac{3}{8}$".

T. xxvii. 2. Fr. of porcelain bowl with ring-base, glazed inside and out with pale blue-grey glaze. Outside shows part of sunflower design in iron-red, with green and red dabs below, painted over glaze. Under-side of base, within base-ring, orn. with one broad, one narrow band in dark brown. Chinese. $1\frac{3}{4}$" × $1\frac{11}{16}$". Pl. IV.

T. xxvii. 3. Pottery fr., hard well-levigated light-grey ware, wheel-made; outer face flaked off, wheel-marks on inner. Gr. M. $1\frac{7}{16}$".

T. xxvii. 4. Fr. of straight-sided pottery bowl, with flat rim of peculiarly sharp insertion projecting at right angles from side. Two holes for suspension pierced 1" below top. Wheel-made of ill-levigated red clay burning grey, and hard-fired on open hearth. $4\frac{5}{8}$" × $1\frac{3}{4}$".

T. xxvii. 5. Fr. of side and base of stone-ware bowl; fine creamy buff clay with mottled brown glaze on exterior nearly to foot, on interior nearly to bottom; high ring base. Chinese. H. 3", width $3\frac{1}{2}$", orig. diam. of bowl 6".

***T. xxvii. 15. Wooden ink-seal,** cubical in shape. Near top are grooves, for string (?), on one side finished, on opposite only begun. On bottom single Chin. char., in ancient form, undetermined. [Mr. L. C. Hopkins.] H. $\frac{7}{8}$", face $\frac{9}{16}$" sq. Pl. LIII.

For other specimens, see T. xiv. a. 003; xxvii. 003, 005–006; xxviii. d–g, j, q; and cf. clay sealing T. xiv. a. i. 001.

T. xxvii. 001. Small iron bar, sq. in section, broken at both ends. $2\frac{1}{8}$" × $\frac{1}{4}$" sq.

T. xxvii. 002. Fr. of grey steatite, thin flat oval, water-worn. $\frac{5}{8}$" × $\frac{1}{2}$" × $\frac{1}{16}$".

T. xxvii. 003. Wooden ink-seal or die (?); oblong block with ink curves and lines painted on sides, and remains of projecting seal-face (?) at one end. Cf. T. xii. a. ii. 005; xxviii. j. 1" × $\frac{5}{8}$" × $\frac{1}{2}$". Pl. LIII.

T. xxvii. 004. Frs. of soft white stone.

T. xxvii. 005–006. Two wooden ink-seals (?); small oblong blocks, roughly cut; 005 has remains of narrower projecting seal-face at one end (cf. T. xxviii. j), and faded

ink-marks on one side. Both apparently unfinished. *005*, $1\frac{3}{8}'' \times \frac{7}{8}''$ (max.) $\times \frac{3}{4}''$ (max.); *006*, $1\frac{1}{8}'' \times \frac{9}{16}''$ sq.

T. xxvii. 007–008. Two wooden dice or counters (?); small oblong blocks; 007 painted black all over except on one long side, from which paint has been removed; 008 showing remains of ink or paint on one side. Cf. T. xii. a. ii. 005 and xxviii. d–g, k–n. $\frac{15}{16}''$ and $\frac{7}{8}'' \times \frac{9}{16}'' \times \frac{1}{2}''$.

T. xxvii. 009. Wooden knob or stopper, similar to T. xii. 0015 but much smaller, unpainted, and neatly cut. Long stem preserved intact, ending in short four-sided point. Both stem and head sq. in section. Length 2″, diam. $\frac{1}{2}''$ sq. to $\frac{1}{4}''$ sq.

T. xxvii. 0010. Wooden peg resembling T. 002, but oblong in section and roughly shaped. On flat front is rudely drawn face in ink, extending almost to bottom of peg. Nose long and narrow; heavy eyebrows and eyes sloping strongly downwards and inwards; moustache and beard. Cf. T. xxviii. 35. $6\frac{1}{2}'' \times 1\frac{5}{8}''$ (max.) $\times \frac{1}{2}''$.

T. xxvii. 0011. Part of wooden fire-stick (female), like L.A. v. ii. 1. Three grooves cut down one edge, and two down the other; remains of one 'hearth' on one side; on other, two and beginning of third. Interesting as showing that groove was cut first. $4\frac{3}{8}'' \times 1\frac{1}{8}'' \times \frac{5}{8}''$.

T. xxvii. 0012. Wooden comb with high-arched back; cf. L.A. viii. 001, but unusually coarse; six teeth only, $\frac{1}{8}''$ from each other. H. $4\frac{1}{4}''$, width $1\frac{7}{8}''$, length of teeth 2″.

T. xxvii. 0013. Wooden knob or stopper, like T. xxvii. 009. Remains of black paint on head, which is cut back sq. to stem. Length $1\frac{3}{16}''$ ($\frac{3}{4}''$ neck, $\frac{9}{16}''$ head), diam. $\frac{1}{2}''$ sq. to $\frac{5}{16}''$ sq. Pl. LIII.

T. xxvii. 0014. Sixteen wooden writing slips, uninscribed (5 whole, 11 frs.). Length (whole) $8\frac{1}{2}''$.

T. xxvii. 0015. Wooden spoon, with rounded-oblong flat bowl and handle in continuous curve. Length $7\frac{1}{2}''$ (of bowl $2\frac{1}{2}''$), gr. width $1\frac{5}{16}''$.

T. xxvii. 0016. Wooden rod neatly trimmed round. Length $8\frac{5}{8}''$, diam. $\frac{3}{16}''$.

T. xxvii. 0017. Wooden spatula, with straight-sided narrow blade. Length $5\frac{3}{4}''$ (blade $2\frac{1}{4}''$), gr. width $\frac{3}{8}''$.

T. xxvii. 0018–0019. Two wooden pens, made of sticks, with bark on, trimmed to point. See T. xii. 0012. Length 5″ and $4\frac{1}{2}''$, diam. $\frac{1}{2}''$ and $\frac{3}{16}''$.

T. xxvii. 0020. Wooden rod, oblong in section, having at one end raised knob with four edges bevelled almost to point; other end broken. Cf. T. xii. 0015, etc. $3\frac{1}{4}'' \times \frac{3}{4}'' \times \frac{3}{8}''$.

T. xxvii. 0021. Fr. of reed broom (?). Reeds, shredded, appear to have been arranged in bundles of about $\frac{3}{8}''$ diam., and then to have been plaited together at one end and tied with string. (Adhering to lump of clay and stones.) Length *c.* $4\frac{3}{4}''$.

T. xxvii. 0022. Strong fibre rope made of split stalk of some creeper. Quadruple, being made of two double strands; one end knotted, the other unravelled. Length 1′ 7″, diam. $\frac{1}{2}''$.

T. xxvii. 0023. Fr. of fibre string matting. Over a horizontal length of stout hemp cord, loosely twisted one-ply fibre strings are passed, and the two ends twisted together; $2\frac{1}{4}''$ down, these are kept apart and knotted round a second horizontal hemp cord. Fresh lengths of fibre string are then passed in the same way over this second cord, each also looped about one of the upper vertical strands. An inch lower a double hemp string passes along horizontal, the two strands enclosing in turn each vertical string, and twisting to take the next. $1\frac{1}{2}''$ below this the vertical strings, coming to an end, are knotted round a horizontal cord, and the process repeated. The unravelled ends of each set of vertical strings hang loose behind the fabric, and do not show in front. Four courses extant. *c.* 1′ 2″ × 10″. Pl. LIV.

T. xxvii. 0024. Fr. of stone ware bowl; lower part of side. Buff clay; interior coated with pale greyish-white glaze, exterior unglazed except for a drop of dull green. Gr. M. $1\frac{3}{4}''$.

OBJECTS EXCAVATED AT WATCH-TOWER T. XXVIII

T. xxviii. a–b. Two wooden seal-cases: (*a*) type B; (*b*) type A; see T. viii. 5. Excellent condition. (*a*) $1\frac{5}{8}'' \times 1\frac{3}{8}'' \times \frac{1}{2}''$; (*b*) $1\frac{1}{2}'' \times 1\frac{1}{4}'' \times \frac{1}{2}''$.

T. xxviii. c. Wooden counter or die (?), tip-cat shaped as T. xviii. iii. 003, but with no marks. Surface smooth and polished. Length $1\frac{1}{4}''$, section in middle $\frac{9}{16}''$ sq.

T. xxviii. d–g. Four oblong wooden blocks, plain sides and ends; prob. for making dice or seals. See T. xii. a. ii. 005, xxvii. 15. Good condition. Length $\frac{7}{8}''$ to $1\frac{1}{8}''$, diam. $\frac{7}{16}''$ sq. to $\frac{13}{16}''$ sq.

T. xxviii. h. Seven-sided wooden stick. One end cut off sq., at other has been cut down inwards from the angles so as to leave a slender rod (broken) projecting at centre from a rough five-petalled lotus. Length $2\frac{3}{16}''$, diam. $\frac{5}{8}''$.

T. xxviii. j. Wooden ink-seal; oblong block of tamarisk (?) wood, roughly cut away at one end to make small projecting sealing-face $\frac{5}{16}''$ sq.; no longer perfect, but containing a single Chin. char., not determined. [Mr. L. C. Hopkins.] Cf. T. xxvii. 15, xxviii. d. $1\frac{1}{2}'' \times \frac{9}{16}''$ sq. Pl. LIII.

T. xxviii. k–n. Four oblong wooden blocks; each long face having cross-diagonals drawn on it in ink, and the spaces so formed filled with dashes and dots. Possibly for making seals, the die-cutter having only roughly blocked out his design; or for dice. Cf. T. xii. a. ii. 005, xxvii. 15. *k* and *m* in excellent condition, *l* and *n* worn. Length $\frac{15}{16}''$ to $1\frac{1}{8}''$, diam. $\frac{7}{16}''$ sq. to $\frac{1}{2}''$ sq. *k*, Pl. LIII.

T. xxviii. o. Leather disc with hole at centre like washer; irregular at outer edge, but approximately circular at inner edge. Outside diam. $1\frac{3}{4}''$, inside diam. $\frac{13}{16}''$.

T. xxviii. p. Fr. of small wooden comb, straight-backed, teeth broken off. Gr. M. $1\frac{1}{2}''$.

T. xxviii. q. Half of wooden ink-seal; small block; L. half has split away. Face, originally prob. $\frac{1}{2}''$ sq., contained four Chin. chars. of which two remain, finely cut. Upper one not determined, lower one 印 *yin* ('seal') [Mr. L. C. Hopkins]. Seal broken along line of hole which has been drilled almost completely through lengthways. Cf. T. xxvii. 15. $\frac{1}{2}'' \times \frac{3}{16}''$ (broken) $\times \frac{5}{16}''$. Pl. LIII.

T. xxviii. r. Fr. of wooden spoon, longitudinal half; flat rounded bowl with beginning of handle. Length $4\frac{7}{8}''$, gr. width $1''$.

T. xxviii. s. Wooden stick, elliptical in section, obliquely pointed at one end, near which is string loop firmly attached. Other end cut sq. Hard and well preserved. $5\frac{3}{4}'' \times \frac{3}{4}'' \times \frac{3}{8}''$.

T. xxviii. 1. Fr. of side and rim of pottery bowl, wheel-made of red clay, burning grey, well-levigated, fired hard on an open hearth and 'smothered'. Inner surface flaked off. $3\frac{3}{8}'' \times 1\frac{7}{8}''$.

T. xxviii. 2. Two frs. of pottery from lower part of large vessel, pierced and reunited by cord fastening tightened by small wooden wedge. Wheel-made of well-levigated clay, red-burning; 'smothered' grey; 'smothering' did not take underneath base of vessel, which remained red. $3\frac{15}{16}'' \times 3\frac{1}{8}$. Pl. LII.

T. xxviii. 3. Fr. of rim and shoulder of pottery jar, wheel-made of grey-burning clay, kiln-fired, poorly potted. Incised line round shoulder. Rim moulding, bevel from neck out to sq. rim, having very slight offset to secure stopper. Inner face much flaked away. $2\frac{5}{16}'' \times 1\frac{1}{2}''$.

T. xxviii. 35. Rough rectang. piece of wood, with crude drawing of face in ink covering whole of one surface; sides split off after drawing was executed. Cf. T. vi. b. iv. 001, xix. 001. $4\frac{3}{8}'' \times 1\frac{7}{8}'' \times \frac{3}{8}''$. Pl. LII.

T. xxviii. 63. Roughly trimmed split wooden stick. On rounded side a face crudely drawn in red and black. Cf. T. 002, xxviii. 35. $7\frac{1}{4}'' \times \frac{7}{8}'' \times \frac{1}{4}''$ (max.).

T. xxviii. 001. Bowl of flat wooden spoon. On it are burnt rings, suggesting that it was a metal-worker's spoon. $2\frac{1}{2}'' \times 2'' \times \frac{3}{16}''$.

T. xxviii. 002. Half of wooden comb, with arched back as L.A. vi. ii. 0014. H. $2\frac{7}{8}''$, width $1\frac{5}{16}''$, 10 teeth to $\frac{1}{4}''$.

T. xxviii. 003. Fr. of wooden comb, round-backed as L.A. vi. ii. 0014. H. $2\frac{3}{4}''$, width $\frac{3}{4}''$, 10 teeth to $\frac{1}{4}''$.

T. xxviii. 004. Wooden stick, sq. in section, cut to long point at each end. One side is plain; next has one groove cut across centre; third has two grooves equidistant from centre, fourth a central diagonal cross. Prob. a measure cut down to other uses. Length $4\frac{1}{8}''$, length of sq. sectional part $2''$, sides $\frac{1}{4}''$.

T. xxviii. 005. Strip of wood, prob. from writing slip. $2'' \times \frac{7}{16}'' \times \frac{3}{16}''$.

T. xxviii. 006. Twelve wooden writing slips, uninscribed. Gr. length $12''$.

T. xxviii. 007. Wooden stick, roughly trimmed round. Length $8''$, diam. $\frac{11}{16}''$.

T. xxviii. 008. Part of warped wooden board; prob. for writing tablet, but unfinished. $5'' \times 3'' \times \frac{3}{16}''$.

T. xxviii. 009–0010. Two bronze arrow-heads; type T. 007. 009 has lost its point. Length $\frac{15}{16}''$ and $1\frac{3}{16}''$.

T. xxviii. 0011. Bronze arrow-head, resembling T. 007, but much shorter in the point; hollow in one side. Cf. T. xxxi. 001. Much corroded. Length of blade $\frac{3}{4}''$, total $1\frac{1}{16}''$.

T. xxviii. 0012. Bronze arrow-head; type T. xv. 008; triangular head long and narrow, with sharp barbs; hollows in all three sides. Well preserved. Length of blade $1\frac{1}{2}''$, total $1\frac{3}{4}''$.

T. xxviii. 0013. Bronze chip off arrow-head (?). Length $\frac{5}{8}''$.

T. xxviii. 0014. Flat bronze strip, oblong in section, slightly bent. $1'' \times \frac{1}{8}'' \times \frac{1}{16}''$.

T. xxviii. 0015. Short hexagonal bronze rod, pierced at one end. Remains of arrow-head? Length $\frac{15}{16}''$, diam. $\frac{1}{4}''$.

T. xxviii. 0018. Fr. of cast-iron hoe-blade; as T. xv. 004, but with curved (concave) top edge. Wood ran in socket to within $\frac{1}{2}''$ of working edge. One side of socket and both ends broken away. $3'' \times 1\frac{1}{4}''$ to $1''$, metal $\frac{5}{16}''$ thick below base of socket.

T. xxviii. 0019. Iron skewer; cf. T. xii. a. 0026. Pin round in section, beaten at end into flat strip which is bent into ring-handle. Length $4\frac{1}{4}''$, diam. of pin $\frac{1}{8}''$.

T. xxviii. 0020. Bronze buckle. Straight bar-loop for attachment to strap; buckle proper curved; tongue-hinge set in very solid centre. One half, including tongue, missing. $1\frac{3}{4}'' \times 1\frac{1}{4}'' \times \frac{1}{4}''$.

T. xxviii. 0021. Two frs. of silk fabric, one pale blue, *c.* $1' 2'' \times 3''$; one black, muslin-like texture, $6'' \times 1\frac{1}{2}''$.

OBJECTS EXCAVATED AT WATCH-TOWER T. XXIX

T. xxix. a–c. Three frs. of pale buff stoneware, with thin creamy glaze on inner face. (*b*) shows portion of rim, very slightly thickened, with glaze extending also about $\frac{3}{8}''$ downwards from rim on outside. (*c*) has lost all but one small patch of glaze. Chinese; Ting type. Perhaps Sung dynasty. Gr. M. $1\frac{5}{8}''$.

T. xxix. d. Fr. of pale buff stoneware; outside, creamy glaze giving place to light-brown 'smear'; inside, creamy white glaze minutely crackled. Gr. M. $\frac{11}{16}$".

T. xxix. e. Fr. of hard gritty buff-coloured stoneware; glaze on convex side only, dull olive green, laid over black and giving mottled effect like later 'tea-dust' glaze. Gr. M. $1\frac{3}{4}$".

T. xxix. f. Fr. of thick buff gritty stoneware, with brown-black glaze on exterior and part of interior. Chinese; perhaps T'ang dynasty. Gr. M. $1\frac{3}{4}$".

T. xxix. g. Fr. of greyish buff stoneware; brilliant black glaze, very thin, on external face only. Chinese; perhaps T'ang dynasty. Gr. M. $1\frac{3}{8}$".

T. xxix. h. Fr. of straight-sided stoneware bowl, wall and plain rim. Body of light grey clay, hard; covered both sides with greenish-brown glaze, very thin, mottled, pale at rim and deepening below to dense brown. Chinese; Sung dynasty. Gr. M. 1".

T. xxix. i. Fr. of porcelain bowl; body warm grey, glaze (both sides) rather thick, pale celadon green. Chinese; prob. Sung dynasty. Gr. M. $1\frac{1}{8}$".

T. xxix. j. Fr. of rim of porcelain bowl, with white glaze on both sides, translucent, crackled; rim very slightly curved outward. Chinese; not earlier than Ming dynasty. Gr. M. $1\frac{1}{2}$".

T. xxix. k. Fr. of coarse porcelainous ware, with creamy white glaze on both sides, thin, translucent, and crackled. $\frac{3}{4}$" sq.

T. xxix. l. Fr. of grey porcelainous ware, with pale celadon green glaze on both sides. Chinese; Sung dynasty. Gr. M. 1".

T. xxix. m. Fr. of fine buff stoneware; glaze on both sides, rather thick, opaque and very even; an exquisite shade of greenish turquoise. Chinese; Sung dynasty (?). Gr. M. $\frac{3}{4}$".

T. xxix. n. Bronze ring, cast; surface corroded; seems to have had some attachment at one point. Diam. $1\frac{3}{4}$" to $1\frac{5}{8}$", thickness $\frac{1}{8}$".

T. xxix. 1. Fr. of straight-sided stoneware bowl, wall and plain rim. Hard greyish-white body with deep greenish-brown glaze of varying thickness on both sides, partly crackled. Chinese. Gr. M. $2\frac{3}{4}$".

T. xxix. 2. Fr. of shallow stoneware bowl, bottom with base-ring. Hard whitish drab clay; outside unglazed, only a blue-grey smear; inside, dark brown glaze, with base-ring round middle. Chinese. Gr. M. $3\frac{1}{8}$".

T. xxix. 3. Fr. of stoneware bowl, wall and plain rim. Body of hard whitish buff clay with black crackled glaze on both sides, flaked off in parts. Chinese. Gr. M. $2\frac{3}{8}$".

T. xxix. 4. Fr. of buff stoneware; exterior has rich black glaze; interior unglazed save for casual running of glazing material from above. Chinese. Gr. M. $2\frac{5}{16}$".

T. xxix. 5-6. Two frs. of straight-sided stoneware bowl, wall and plain rim; body of hard buff clay with mottled dark brown glaze inside and out. Chinese. Gr. M. 2".

T. xxix. 7. Fr. of stoneware vessel, of coarse drab clay, wheel-made; outside, tea-green glaze over black, giving mottled effect; inside unglazed except for a streak of black spilt down. Chinese. Gr. M. $1\frac{7}{8}$".

T. xxix. 8. Fr. of pottery from same vessel as T. xxix. 10 (q. v.). Gr. M. $1\frac{9}{16}$".

T. xxix. 9. Fr. of pottery; hand-made, badly potted, of ill-levigated pinkish-drab clay burning to cream, fired on an open hearth. Orn. by two bands of comb-drawn wave pattern (the upper inverted), separated by double incised line. Gr. M. $3\frac{1}{4}$".

T. xxix. 10. Fr. of straight-sided pottery bowl, wall and rim. Flanged rim, nearly flat on top but with slight groove to catch cover. Wheel-made, of well-levigated greenish-drab clay, badly potted, kiln-fired. Gr. M. $3\frac{1}{8}$".

T. xxix. 11. Fr. of edge of straight-sided stoneware bowl; plain rim, body of whitish drab clay with dark brown glaze on both sides. Chinese. Gr. M. $1\frac{7}{8}$".

T. xxix. 12. Fr. of base of stoneware bowl, with high base-ring; pinkish white porcelainous ware with creamy glaze inside, base-ring round centre. Chinese ware of coarse Ting type. Gr. M. 2".

T. xxix. 001. Wooden spoon, with flat narrow pointed bowl, and curved handle sq. in section. Roughly made. Length (end to end) $6\frac{1}{2}$", of bowl 2", gr. width $\frac{5}{8}$".

T. xxix. 002. Stucco relief fr.; two heads, one above the other, chin of upper head sunk into lower's crown. Both have lost their ears; hair same in both, parted in centre, and drawn back and up in waved locks with semi-partings between. Crown of upper head above fringe of hair is plain and unfinished, lower head broken at neck. Upper has placid expression. Eyes are half closed and pupil shown by hole in raised eyeball. Line of bowed lips very carefully shown; *tilaka* in middle of forehead. Lower has intense expression with frown, and open mouth, showing teeth; cf. Mi. xi. 0057. Eyes wide open and eyeball solid; double chin. Both show traces of paint all over that is now dark grey. Prob. part of a *trimūrti* fig., the third head missing from below. Soft clay mixed with hair. Very finely moulded, the two heads separately, faces apart from heads. H. of whole $6\frac{3}{4}$"; h. of each, chin to hair, $2\frac{3}{4}$". Pl. CXXXIX.

T. xxix. 003-004. Stucco frs., pair of life-size hands, 003 R., 004 L. Hand 003 broken off at wrist; middle finger broken close to first joint, the rest close to knuckles, and thumb just below second joint. Of 004 only back of hand with beginning of fingers remains; remains of iron rod as core in solid part. Both painted black; poor work. Soft clay mixed with hair. Across knuckles 3" and $3\frac{1}{4}$".

T. xxix. 005–007. Stucco frs.; two fingers and thumb prob. belonging to T. xxix. 003–004. 005, tapering finger, bent over in curve without any joint; 006, extended tapering finger, slightly curved; 007, thumb, showing nail with creases at root and creases on inner side of joints, carefully modelled. All painted black, *c.* life-size. Soft clay mixed with hair. Lengths $2\frac{3}{4}''$, $3\frac{5}{8}''$, $2\frac{1}{4}''$.

T. xxix. 008. Stucco relief fr., end of drapery. Traces of dark paint. Soft clay mixed with hair. $3'' \times 1\frac{3}{8}'' \times \frac{1}{2}''$.

T. xxix. 009. Fr. of goat's hair fabric, brown with one yellow stripe; coarse plain weave; weft threads run in pairs. *c.* $9'' \times 2\frac{1}{2}''$.

T. xxix. 0010. Stucco relief fr., three folds of drapery painted black. Soft clay mixed with hair. $1\frac{7}{8}'' \times 1\frac{3}{16}'' \times \frac{1}{4}''$.

T. xxix. 0011. Stucco relief fr. of ornamental band. Along edges a double moulding, of which inner is beaded; between, apparently a running bough with spiral tendrils on each side; was applied to curved surface, and relief is on convex side. On concave side diagonal lines incised, prob. to help it to bind. Painted black; from baldric (?). Soft clay mixed with hair. $2\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{3}{16}''$.

T. xxix. 0012. a–b. Stucco relief frs. (*a*) L. upper arm, (*b*) R. forearm from same fig. Both show plentiful traces of grey paint. (*a*) is very fragmentary, but shows overlapping armlet orn. with central rosette at elbow; (*b*) is complete in the round, but all fingers are broken from hand. Both have round wooden cores, which at elbow are cut flat to half their thickness and pinned to core of other half arm by two dowels. The joint is also tied round with string. In (*b*) part of upper arm core preserved and joint perfect. Upper core charred at upper end. Soft clay mixed with fibre. Length (*a*) $10\frac{1}{2}''$, (*b*) $10\frac{1}{2}''$; wrist to elbow $7\frac{1}{2}''$.

T. xxix. 0013. Pottery jar, hand-made of brown-drab clay, ill-levigated but with smoothly finished surface slightly burnished and coloured (by oil?); hearth-burned; round shoulder two incised bands; neck broken. H. $12''$, diam. $7\frac{1}{2}''$. Pl. IV.

OBJECTS EXCAVATED AT WATCH-TOWERS T. XXXI, XXXII, AND XXXIV

T. xxxi. 001. Bronze arrow-head. Triangular blade with edges markedly curved to give leaf-shape to faces. Hexagonal shank formed by merely shaving off corners, not by cutting them back; blunted point; sides plain; traces of iron tang. Length of whole $\frac{7}{8}''$ (of blade $\frac{11}{16}''$). Pl. LIII.

T. xxxii. 001. Rude block of wood, not trimmed. $2\frac{3}{4}'' \times 1'' \times \frac{3}{8}''$.

T. xxxii. 002. Wooden pen; twig with bark on, rudely cut to point. Length $4\frac{1}{4}''$.

T. xxxii. 003. Forked twig, bark stripped off. Length $3''$.

T. xxxii. 004. Tapering green jade cylinder, pierced lengthways. Length $1\frac{3}{16}''$, diam. $\frac{1}{4}''$ to $\frac{5}{16}''$.

T. xxxii. 005–007. Specimens of reed stems. Length $3\frac{1}{4}''$.

T. xxxii. 008. Hemp string, knotted, ends unravelled. Length $1'\ 1\frac{1}{2}''$, thickness *c.* $\frac{1}{12}''$.

T. xxxii. 009. Bronze arrow-head; type of T. xv. 008, but smaller; depressions in two sides. Condition poor. Length $1\frac{3}{8}''$ (of blade $1\frac{1}{16}''$). Pl. LIII.

T. xxxii. 0010. Curled end of wooden bracket; cf. T. viii. 004; broken off. On each side, end of spiral; from central rib of this, broad shallow bevel to edge. Plain end. Painted black all over. $1'' \times 1\frac{3}{8}'' \times 1\frac{1}{8}''$.

T. xxxiv. 001. Wooden fire-stick ('female'), like L.A. v. ii. 1, but of exceptional size. Set of 'hearths' along each side—five on one and two on other; edges now much broken. $8\frac{1}{2}'' \times 2\frac{1}{2}'' \times \frac{3}{4}''$. Pl. LII.

T. xxxiv. 002. Flat wooden block with tenon projecting from middle of each end. Coloured black all over except tenons. $4\frac{1}{16}'' \times 2\frac{1}{4}'' \times \frac{1}{2}''$. Tenons $\frac{11}{16}'' \times \frac{7}{8}'' \times \frac{3}{8}''$.

T. xxxiv. 003. Oblong rectang. wooden block. From either end a small sq. tenon protrudes flush with back face of block; top front edge of block bevelled away to half width of adjoining sides; bottom of block hollowed out at right angles to length, leaving projecting ends. From centre of top face to bottom a hole pierced ($\frac{3}{16}''$ diam.). Painted black all over. $2\frac{1}{4}'' \times 1\frac{1}{2}'' \times 1\frac{5}{8}''$. Pl. LIV.

T. xxxiv. 004. Misc. string and fabric frs., including: bundle of string made of twisted grass, piece of coarse cotton (?) fabric, buff, and fr. of pale brown silk, rotted. Gr. M. $15''$.

T. xxxiv. 005. Wooden pen; stick with bark removed, cut to rude point. Length $4\frac{3}{4}''$.

T. xxxiv. 006. Specimen of materials from Han Limes wall, consisting of reeds of various thickness with leaves, twigs, water-worn pebbles, etc., adhering.

CHAPTER XXI

THE CAVES OF THE THOUSAND BUDDHAS

Section I.—GENERAL DESCRIPTION OF THE SITE

My exploration of the ancient desert Limes of Tun-huang had been exceptionally fruitful in results, but I felt glad, all the same, when its successful completion allowed me by May 15, 1907, to regain the oasis; for now I was free to turn definitely towards the cave-temples of the 'Thousand Buddhas' or *Ch'ien-fo-tung*, in the barren foot-hills south-east of Tun-huang, upon which my eyes had been fixed from the very first as one of the main goals of my expedition. The rapid preliminary visit I had paid to these shrines after my first arrival in March, as previously mentioned,[1] had shown me their wealth of old Buddhist sculptures and frescoes. It had amply sufficed to convince me how well, by their artistic value and archaeological interest, they deserved the glowing description which five years before Professor L. de Lóczy had given me of them. But what I had been able to ascertain on my first visit about a great collection of ancient manuscripts, accidentally discovered some years before in one of the temples, had made me still more anxious to explore the site. For some days, however, after my return I was detained by urgent practical tasks and still more by needful regard for the annual pilgrimage, which just then carried thousands of pious folk from all parts of the district to the sacred caves and for the time would have seriously hampered operations on my part. So it was not until May 21 that I could establish my camp there.

Archaeological interest of *Ch'ien-fo-tung*.

Before proceeding to an account of the labours which kept me busy at the 'Caves of the Thousand Buddhas' for over three weeks, and of the results which they yielded, it is necessary to give a general description of this important site and of its most notable features. At a distance of about 10 miles in the direct line from Tun-huang town to the south-east there debouches into the Su-lo Ho basin a desert valley, half a mile or so wide at its mouth, but higher up contracting into a cañon-like gorge. A now insignificant stream, fed at present by the subsoil drainage coming from a higher outward range of the Nan-shan,[2] has in an earlier geological epoch carved out this valley through the low hill chain, furthest to the north. To the west of the Ch'ien-fo-tung valley this hill chain is completely covered by huge dunes of coarse drift-sand. These, extending as far as the Tang Ho, fringe the southern edge of the Tun-huang oasis and account for the later name of its town, *Sha-chou*, or 'the City of the Sands'. Offshoots of these high drift-sand ridges overlook the Ch'ien-fo-tung valley from the west and are visible in the background of Figs. 191, 193. To the east of it the low chain of hills bears an equally desolate aspect. Curiously eroded grey slopes, bare of all traces of vegetation, emerge here above the glacis of gravel which lower down has smothered all features of the ground (Fig. 194). For a description of the route which leads from Tun-huang town to the debouchure of the valley, and for almost

Physical surroundings of site.

[1] Cf. above, pp. 585 sq.

[2] From Captain Roborovsky's map and the survey effected by R. B. Lal Singh in 1914 it is seen that this drainage originates on the western continuation of the range which I reached south of Shih-pao-ch'êng; see Map No. 82 and Map No. 39. c. 1 of the 1 : 500,000 Atlas of our Central-Asian surveys.

the whole way passes over gravel fans of the same uncompromising sterility, I may refer to my Personal Narrative.[3]

Lower groups of grottoes.

After less than a mile from the point where the cart-track from Tun-huang turns into the silent valley, here still open, the first grottoes come into view, marking the northern end of the sacred site (see Plate 42). They are cut, like all the rest of its shrines, into the almost perpendicular conglomerate cliffs lining the western edge of the wide sandy bed where the stream descending the valley finally loses itself through evaporation, except on occasion of rare floods. The multitude of dark cavities, mostly small, belonging to this northernmost group of shrines honeycomb the sombre rock-faces in irregular tiers up to a level of about 50 to 60 feet above the bed. There the lowest and most precipitous step of the cliff gives way to easier sand-covered slopes. Much of the rock-face that once contained approaches to the various cave-chambers and the passages between them has fallen and crumbled away completely. This is partly due to the erosive action of the wind which sweeps up from the north, and the slow undercutting by the stream which washes here the very foot of the cliff. Along the length of close on 500 yards over which the grottoes of this group extend no trace has survived of wooden galleries and stairs such as must once have served to facilitate approach and communication. The same is the case at a second and smaller group of caves, which is found about 150 yards further up and is shown in its full length on the right of Fig. 193. At both these groups, I may state at once, want of time and difficulty about improvising means of approach prevented close examination on my part. But a variety of indications suggested later origin,[3a] and from the small size of the majority of the recesses and the absence of any wall-paintings in most of them it seemed safe to conclude that they had served largely as quarters for Buddhist monks. Their sombre aspect and setting recalled pictures of troglodyte dwellings of anchorites in some western Thebais.

Southern main group of caves.

It is very different with the southern and main group of caves, which extends along the face of the gradually rising hill scarp for close upon a thousand yards. The panoramic view, Fig. 191, shows almost its whole length, as seen from the gravel plateau across the rubble bed of the stream to the south-east. But the groves of fine elms growing on the cultivated strip of fertile alluvium which stretches here between the foot of the cliff and the bed of the stream, as marked in Plate 42, help to hide in this photograph most of the cave-shrines occupying the lower face of the cliff. Even on closer approach it is difficult to obtain any clear view of the general character and arrangement presented by this wonderful agglomeration of cave-temples; so bewildering is their multitude and the diversity of their disposition.[4] In the obvious absence of any systematic planning for the whole, and in view of the difficulty which any attempt at definite grouping must present, I think that it will best serve the purpose of this general introduction to the site if I reproduce here briefly the impressions received on my first visit.

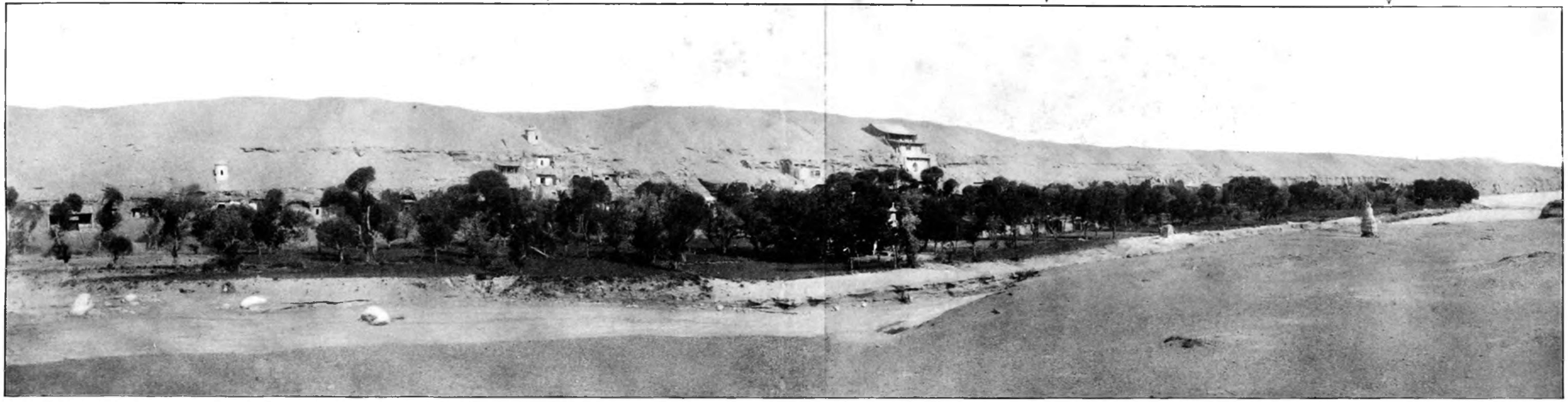
Varying tiers of excavations.

Along the whole length of the scarp of the hill, from below the position marked on Plate 42 by Ch. II, on the north, to above Ch. XVI on the south, the precipitous portion of the rock face shows an unbroken succession of grottoes. Some high, some low, they are all closely serried

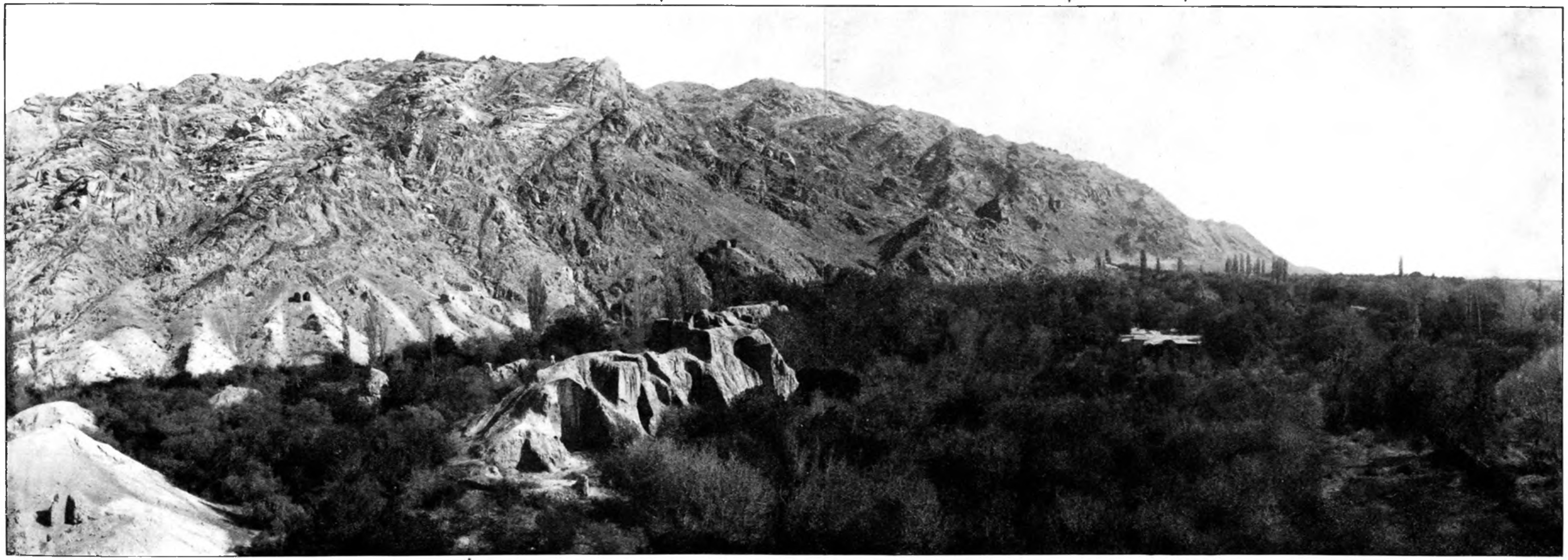
[3] See *Desert Cathay*, ii. pp. 21 sq. The approach to the site and its general aspects are quite correctly described by the author of the *Tun-huang lu*, transl. Giles, *J.R.A.S.*, 1914, pp. 707 sqq.

[3a] The *Tun-huang lu*, *J.R.A.S.*, 1914, p. 709, estimates the distance of the cliff face occupied by cave-temples at 2 li. This corresponds very closely to the actual extent of the southern or main group of caves, taking the li meant at the value indicated by the same text's preceding estimate of the distance from Sha-chou to the site at 25 li. In any case it may be inferred from this statement that the northern groups of caves did not exist when the text was composed about the close of the T'ang dynasty.

[4] Rai Rām Singh in the course of his topographical survey of the site counted roughly 350 separate grottoes in the southern main group. To this number some 165 excavations, most of them quite small, have to be added in the two northern groups.



191. PANORAMIC VIEW OF THE 'CAVES OF THE THOUSAND BUDDHAS', TUN-HUANG, SEEN FROM ACROSS STREAM TO EAST.



192. PANORAMIC VIEW OF RUINED SITE, ARA-TAM, WITH COUNTRY SEAT AND ORCHARDS OF WANG OF HÂMI, SEEN FROM SOUTH-EAST.

P. 792

laterally, and in most parts perched also one above the other. But the number of grottoes thus excavated in tiers varies greatly without any close regard to their respective heights, and that though the available rock face keeps a fairly uniform elevation to where the southern end of the main series of caves is approached, as seen on the extreme left of Fig. 191. Thus, whereas at both the northern and southern ends the rock face, as far as at present exposed, displays only a single line of cave-temples (Figs. 193, 191, respectively), as many as four or five successive tiers may be counted elsewhere, as seen in Fig. 197. Only for short distances, as e. g. near Ch. IX (Fig. 197) and between the two shrines containing colossal Buddha statues (Fig. 199), is it possible to recognize something corresponding to regular rows or stories. The two last mentioned temples stand in a separate category by themselves; for in order to secure adequate space for the giant clay images of seated Buddhas close on 90 feet high which they were meant to shelter, a number of halls were excavated one above the other. Each of these provides light and access for a portion of the colossus, which rises unbroken to the top through a continuous cavity at the back.

Porches and approaches of cave-shrines.

In front of most of the shrines there had been originally antechapels or porches of oblong shape carved out of the rock. Their back and side walls, as well as the ceilings, still retained paintings in tempera which were often faded, now fully exposed to view from the outside owing to the fall of the facing walls (Figs. 195, 199). These in many cases, especially the larger ones, are likely to have been carved out of the rock. But in others they appear to have been replaced, whether originally or on restoration, by wooden verandahs, often still surviving in front of the upper grottoes (Fig. 197), though generally much decayed. In most cases access to, and communication between, these upper shrines seems to have been assured by means of wooden galleries, now marked only by the wooden rafters which once served to support them, or more frequently still by the mere holes into which they were fixed (Figs. 195, 197). The rock-cut or wooden stairs, which were required for the same purpose, had crumbled away almost everywhere, and even rough ladders were to be found only before a few caves which had undergone manifestly recent restoration.

Cave-temples at foot of cliffs.

Many of the shrines high up on the rock face had thus become quite inaccessible. But the disappearance of porches and verandahs, sometimes even of the outer wall of the cella (Figs. 195, 196), made it easy to see that the interior arrangements and decoration of these upper shrines, mostly of modest size, did not differ in any essential way from those prevailing in the cave-temples carved into the foot of the cliff. Access to these offered no difficulty, even though fine drift-sand and alluvial deposit from the bed of the stream, which had been allowed to accumulate during centuries of neglect, had covered the ground in front and also the original floor of the entrance in places to a height of as much as 10 feet (Figs. 195–7). The loss of light that necessarily resulted in the interior from this partial blocking-up of the approach was compensated by the fact that even here, low down, the outermost portion of the rock wall had generally crumbled away completely, and thus left the inner passage leading to the sanctum directly exposed to the sun.

General structural arrangement.

The ground-plan and general structural arrangement of these caves showed a striking uniformity. Outside there came first a kind of oblong antechapel which, owing to the cause just mentioned, was found badly injured in most cases. Where restoration had taken place recently, the front had been closed by a wooden construction with big doors and windows, and this feature is likely to have been present also in the original design. From this antechapel the cave-temple proper was approached through a high and rather wide passage, which alone admitted light and air to the interior excavation. This consisted everywhere of a single rectangular cella, usually almost square in shape and with sides up to 54 feet in length, hewn out of the solid rock and provided with a high conical roof. Within the cella, which is usually a little deeper than it is wide, the larger shrines had generally a big rectangular platform, elaborately decorated in plaster and facing the entrance (Figs. 200, 213; Plates 43–5).

Groups of stucco images.

The centre was invariably occupied by a colossal stucco image of Buddha, by the side of which were grouped in a symmetrical fashion statues of smaller divinities, all of them often badly injured, completely destroyed, or replaced by modern restorations. Usually a kind of screen and canopy combined had been left standing in the rock at the back of the principal image. Behind this, and between the platform and the cella walls, a passage was invariably left for the worshippers to perform the circumambulation, or *pradakṣiṇā*. In the smaller shrines similar groups of stucco images, with a seated Buddha in their centre, were ordinarily found placed in a kind of alcove or raised chapel (Figs. 207, 208, 211, 212, 228, 229; Plates 44, 45). Only in a few instances did I find a departure from these two types of internal arrangement in favour of another by which the centre of the cella was left unexcavated and the square block of rock used as a backing for statues (Fig. 196; Plate 43).

Preservation of wall-paintings.

It was only too easy to realize from the first how much all this statuary in friable stucco had suffered in the course of long centuries through the natural decay of its material, mere soft clay, and even more from the hands of iconoclasts and the zeal of pious restorers. But all the more I was bound to be impressed by the wealth and abundant artistic interest of the obviously old paintings, throughout Buddhist in character, which cover the plastered walls of all the large shrines and of many of the smaller ones. For the most part they are in remarkably good preservation. The last feature, I may explain at once, must be attributed, apart from the extreme aridity of the atmosphere and the dryness of the rock-cut walls, to the profusion of the paintings themselves and to the strength and tenacity with which the plaster bearing them clings to the conglomerate surface. Extensive destruction in the course of vandal inroads would have required here much more time and exertion than it unfortunately did in the case of the mural decoration of Buddhist shrines, whether structural or excavated, at sites of the Tārīm Basin or the Turfān region.[5] At the same time, it is impossible to ignore the additional safeguard which the strongly marked traditions of Buddhist piety, surviving among the people of Tun-huang to the present day, have continued to provide for this place of cult still 'in being', in spite of all its vicissitudes.

General scheme of mural decorations.

I found that the wall-paintings, with the possible exception of those in a single small shrine to be described below,[6] are all executed in tempera. It is in this modified, technically inaccurate, sense that the term 'fresco' must be understood where it is used in the following pages for the sake of convenient brevity. The mural decoration in the passages and antechapels ordinarily represents rows of large Bodhisattvas moving in procession, as seen in Figs. 200, 214, or else seated in tiers. Diapers of small figures of Buddhas and Bodhisattvas, arranged after the fashion familiar to me from the shrines of Dandān-oilik and Khādalik, were found to cover the walls in numbers of small cellas (Figs. 211, 212, 228). Along with elaborate floral designs and tracery they had often been used also for the adornment of the ceiling in the large cellas (Figs. 218, 219). But it was on the walls of these last that the wonderful richness and variety of this pictorial art had found room to express itself fully. There the frescoes generally filled large panels, bordered by floral scrolls of striking beauty. They were arranged either singly (Figs. 209, 210, 231, 232) or, where the surface of the wall was extensive, in a series, as illustrated by Figs. 219–24, 233–6, which show a succession of such big panels from the cella walls of two temples. Painted dados, often representing figures of worshippers, in some cases monks or nuns (Figs. 216, 217, 230), served to raise these panels to an appropriate height above the floor and the statue-bearing platform.

[5] The same technical reason, the firm adherence of the wall plaster to the naturally unequal pebble surface of the conglomerate, promises effectively to protect these mural paintings also from the risk of removal to museums and of far more destructive local exploitation on the same lines; cf. below, chap. xxv. sec. 1, note 2.

[6] Cf. below, p. 929, for the true frescoes of Ch. II. a.

The panels were almost invariably filled by elaborate compositions containing a large number of figures. Varied as the subjects were in details, two main classes could readily be distinguished among them. In one there appeared figures of Buddhas, surrounded by symmetrically grouped hosts of Bodhisattvas, saints, and other divine attendants, all shown in a carefully arranged architectural setting of pavilions, platforms, lotus tanks, etc. (see e. g. Figs. 206, 209, 210, 220, 224, 231, 235). That these panels were meant to represent scenes in Buddhist heavens could be recognized even without any claim to special iconographic knowledge. The other class of fresco panels displayed, in close juxtaposition and often bewildering variety, scenes which looked as if taken from mundane life, but often with sacred figures moving among them (Figs. 217, 218, 221, 222, 233, 236). Similar scenes were sometimes found also in borders or friezes framing the large panels (Figs. 202, 210). The fact that by the side of or above such scenes there appeared very often cartouche-like bands bearing short Chinese inscriptions suggested from the first that these scenes were taken from sacred Buddhist legends. But Chiang Ssŭ-yeh, like Chinese *literati* in general a stranger to all details of Buddhist mythology and iconography, was unable to interpret them adequately. So it was only after similar representations among the pictorial relics which I brought away from the 'Thousand Buddhas', and which will be described further on, had been submitted to expert examination in Europe that I felt assured that these scenes in the mural paintings illustrated Buddhist Jātaka stories.

Panels showing Buddhist heavens and Jātaka scenes.

In these legendary scenes of the panels, with their freely drawn landscape backgrounds and typically Chinese architecture, as well as in most of the decorative designs displayed by the rich floral borders and the ornate exuberance of canopies, friezes, etc., it was impossible not to be struck at once with the prevalence of distinctly Chinese style. Its *penchant* for bold movement and realism was just as clearly expressed in the drawing and grouping of the figures as that for graceful curves and fantastic freedom in the cloud scrolls, floral tracery, and other decorative motifs. But equally certain it was that the representation of all the principal divine figures bore the unmistakable impress of Indian models transmitted through Central-Asian Buddhism. It was the same in the large compositions as in the groups of saints often painted by the side of the main statues (Figs. 201, 207, 208, 213), or even in that schematic multiplication of Buddhas and Bodhisattvas with which Buddhist piety, using the convenient method of stencils, had covered here as elsewhere the walls of so many shrines. Whatever difference there might be in the technique of outlines and colouring, hieratic tradition had preserved for these figures the type of face, pose, and drapery originally developed by Graeco-Buddhist art.

Chinese style of legendary scenes.

Indian type preserved in divine figures.

In spite of this strong conservative tendency there were obviously different phases of development to be distinguished among these wall paintings. Without any Sinological training or expert knowledge of the history of Chinese secular art it was impossible for me to arrive at exact conclusions as to the chronology of the various cave-temples and their pictorial remains. Yet a variety of archaeological indications, some of which will find mention hereafter, suggested that the best of the mural paintings, usually found in the cellas of the large shrines, belonged to the times of the T'ang dynasty, when the sacred site, like the Tun-huang oasis itself, had enjoyed spells of prolonged prosperity, or to the period immediately following. As to the fresco work, later in style but still skilful and vigorous, which was often to be found in the antechapels and passages of these shrines, where the liability to damage had necessarily been greater than within the cellas, it appeared probable that it dated from restorations carried out during periods, such as of the Sung or the Mongol dynasties, when the old artistic traditions could still assert themselves.

Chronology of wall-paintings.

In the case of the sculptural remains it seemed even more difficult to arrive at an approximately correct dating, as their character as 'idols' and their friable material, already referred to,

Character of sculptural remains.

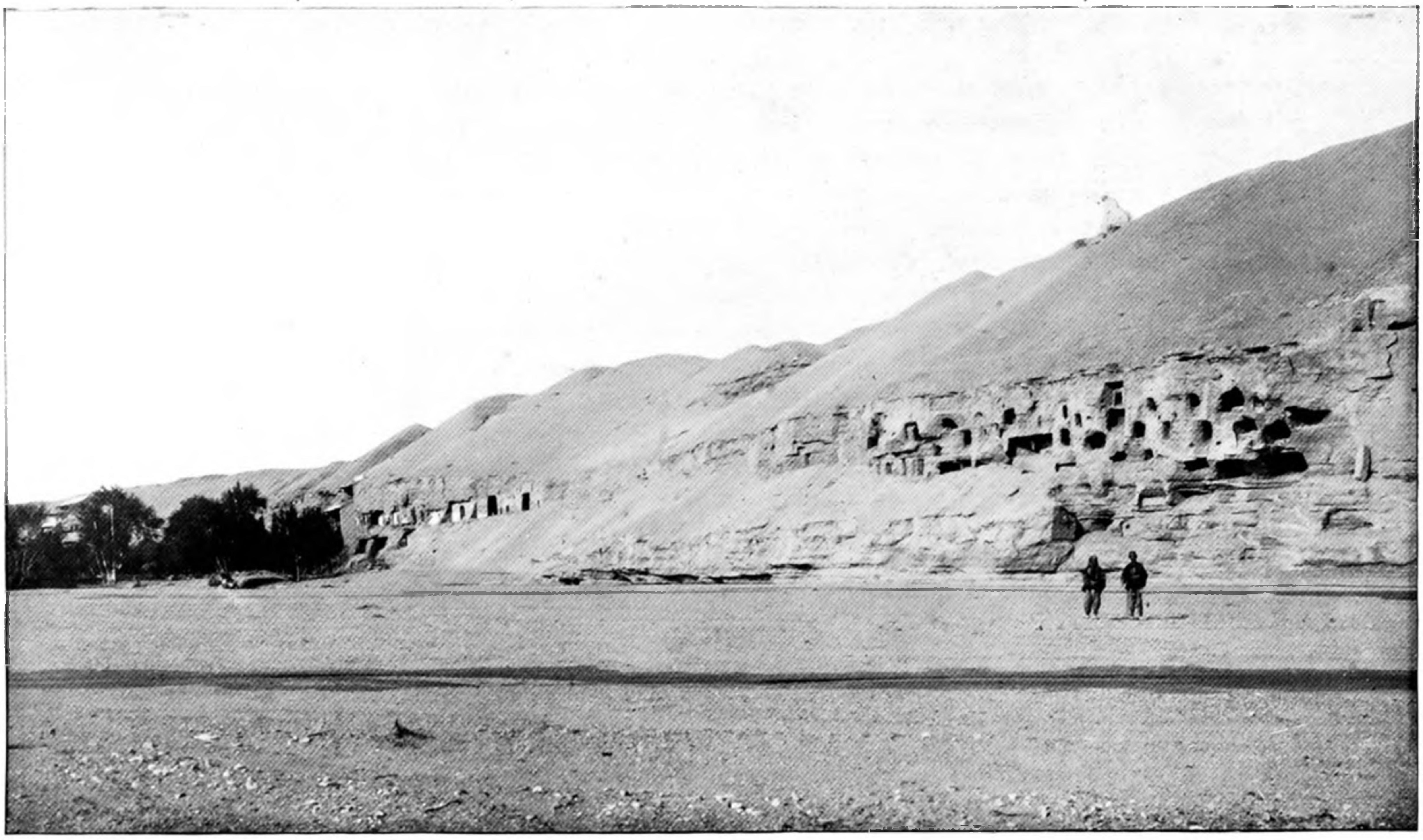
had necessarily exposed them far more than the mural paintings to all the vicissitudes of wilful damage and successive restorations. Yet continuity of traditional arrangement was attested here, too, by the way in which the statuary of the shrines, however much restored, seemed often to correspond in grouping and character to the indications traceable by the original image bases and the haloes shown in relief or painted on the backing walls. Reference to Figs. 207, 208, 211, 212 will help to illustrate this. The usual arrangement, no doubt, was originally a seated figure of Buddha in the centre with groups which varied in numbers but were symmetrically ranged on either side, composed of saintly disciples, Bodhisattvas, and divine attendants. Representations of Dvārapālas, the 'Guardian Kings of the Quarters', were easily recognizable in the richly dressed figures in armour that usually flanked these groups. Even where these familiar figures had completely perished, remnants of their demon cognizances were to be found at the bases. For the correct identification of other figures, broken or restored, familiarity with the mediaeval or modern Buddhist iconography of China would have been probably more useful than any local guide—if such had been procurable.

Remains of old stucco images and their art.

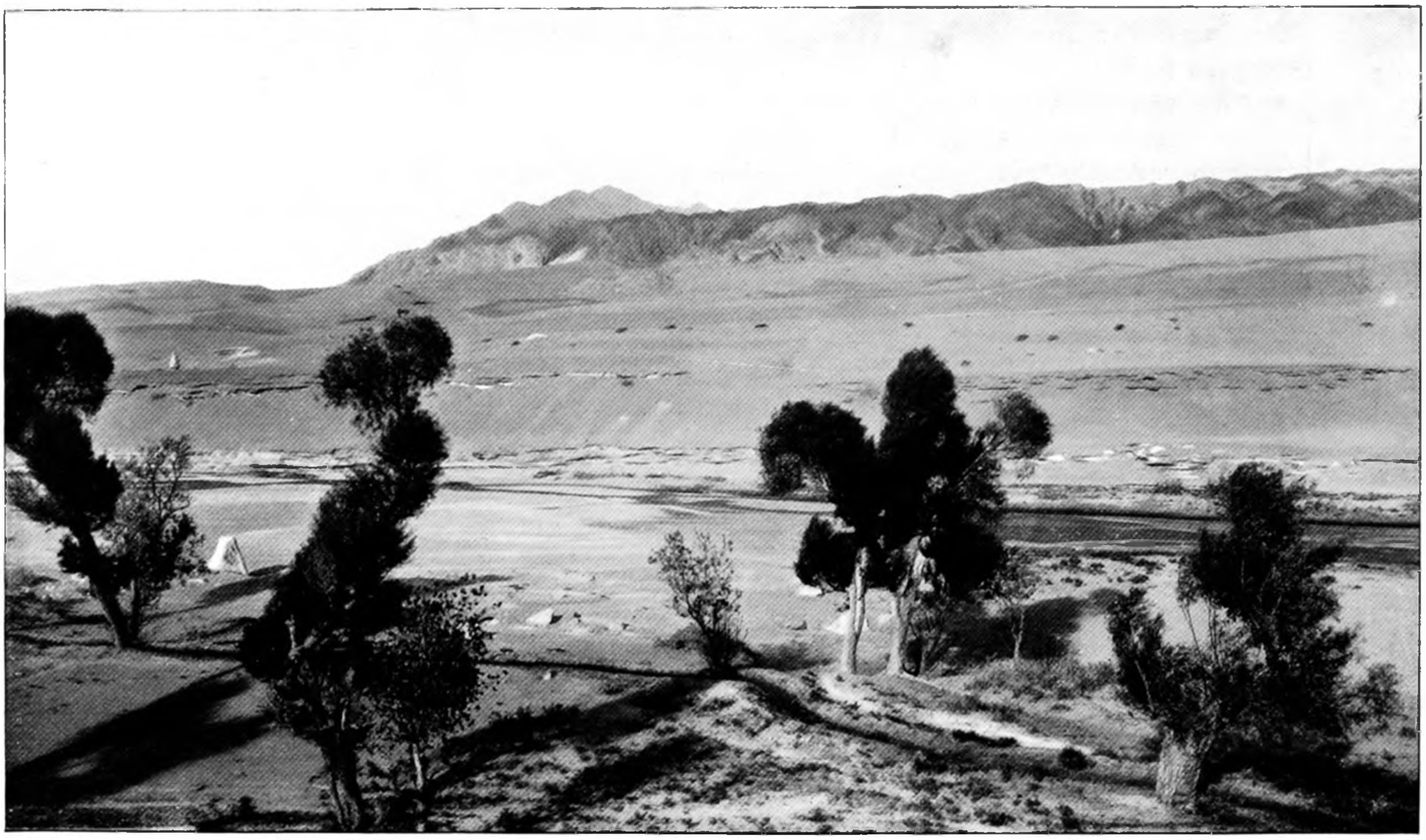
At the outset it was reassuring to note the total absence of those Tantric monstrosities which have found their way into the Mahāyāna Buddhism of the Far East through the spreading influence of the cult as developed in Tibet and the mountain border-lands of Northern India. Closer inspection soon convinced me that, in spite of all the destruction which the stucco images had suffered in the course of successive vandal inroads like that of the Tungans, these cave-temples still retained plentiful remains to attest the prolonged continuance here of the sculptural traditions which Graeco-Buddhist art had developed and Central-Asian Buddhism transmitted to the Far East. The heads, arms, and often the upper portions of the statues in general were due to modern and sadly inadequate attempts at restoration. But their glaring defects and the clumsy ugliness prevailing where the stucco images had been altogether remade, as e. g. seen in Figs. 200, 227, 228, helped by contrast to bring out more clearly the good modelling of what survived elsewhere of the lower portions of statues, as well as the graceful arrangement of the drapery and the exquisite colouring of the whole. Comparison of the partially old sculptural work seen in Figs. 207, 208, 212 is instructive in this respect. It was fortunate that the large, elaborately adorned haloes and vesicas worked in relief at the back of the seated Buddha statues, and usually edged with flame scrolls (Figs. 207, 211, 212), had in many cases escaped serious damage and the risk of repair. The beautiful specimen, seen in Fig. 201 behind a broken over life-size image of Buddha, even when viewed without the harmoniously blended colours of the rich tracery and scrolls, helps us to imagine what the polychrome splendour of the original statuary in these shrines may have been like.

Colossal Buddha statues.

In the profusion of gilding once used for the sculptural work, of which plentiful traces survived on broken statues and relievos, I could recognize an early feature well attested from Gandhāra to Khotan and beyond. It was the same with the remarkable effort bestowed on colossal figures of Buddha, of which two, one standing, one seated, reached to a height of close on 90 feet. These naturally recalled to my mind the huge rock-carved 'Būts' of Bāmiān and made me wonder at the time whether the 'Halls of the Thousand Buddhas' did not owe their creation, indirectly and in the last resort, to the example set at that famous site on the ancient high road from Gandhāra and Kābul to Baktra. There were the cave-shrines of Kuchā and Turfān, far more modest in size, no doubt, but similar in character, to serve as likely links. Undismayed by the great expense implied, pious restorers seemed to have directed their zealous attention towards these colossal images down to quite recent times. The caves in which they rise through a succession of stories had big modern antechapels, with their fronts built of gaily painted timber and elaborately decorated.



193. NORTHERN END OF MAIN GROUP AND MIDDLE GROUP OF CAVES OF THE 'THOUSAND BUDDHAS', TUN-HUANG, SEEN FROM NORTH-EAST.



194. BARREN HILL RANGE EAST OF CH'IEN-FO-TUNG VALLEY SEEN FROM SOUTH END OF MAIN GROUP OF CAVE TEMPLES.

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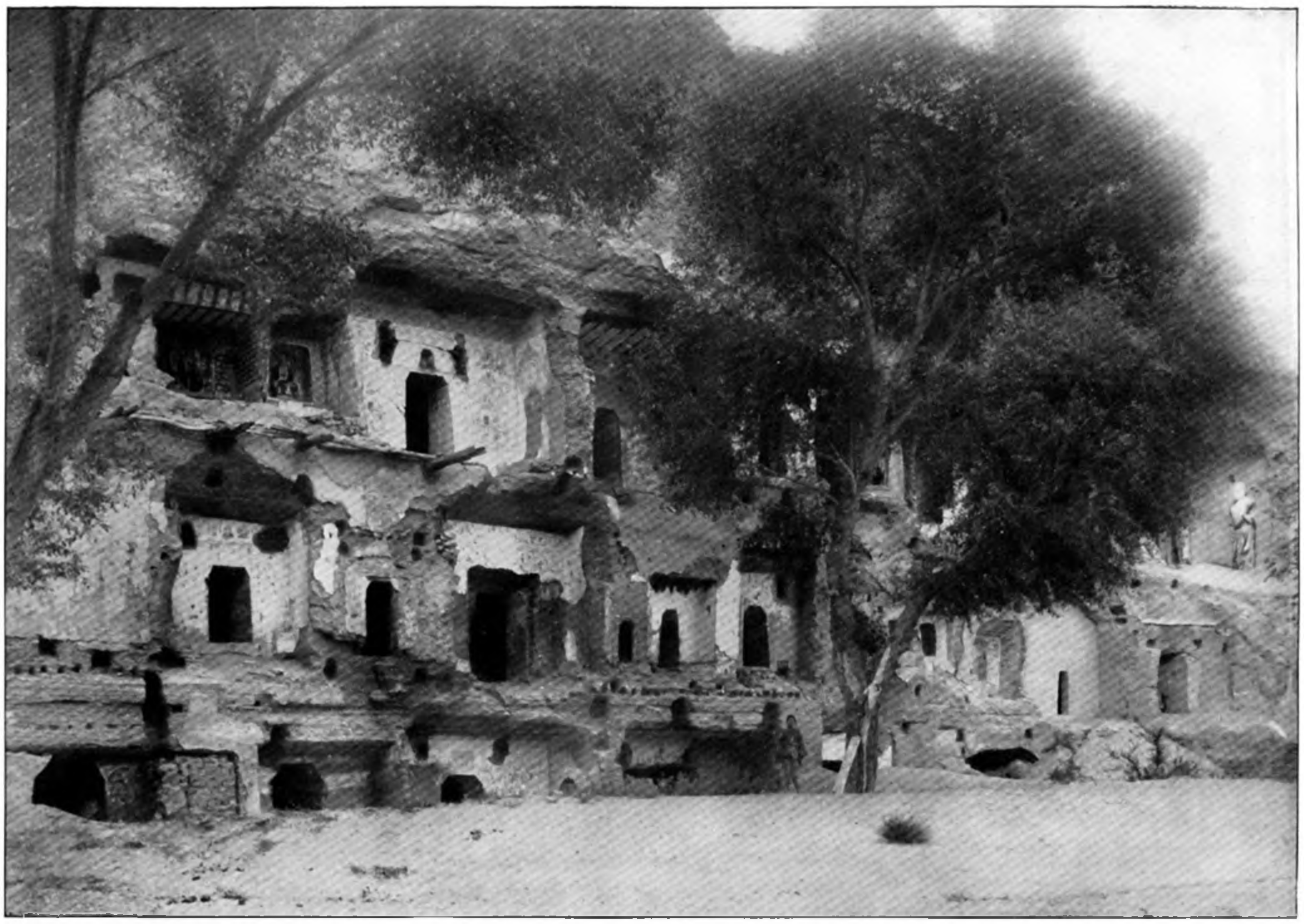
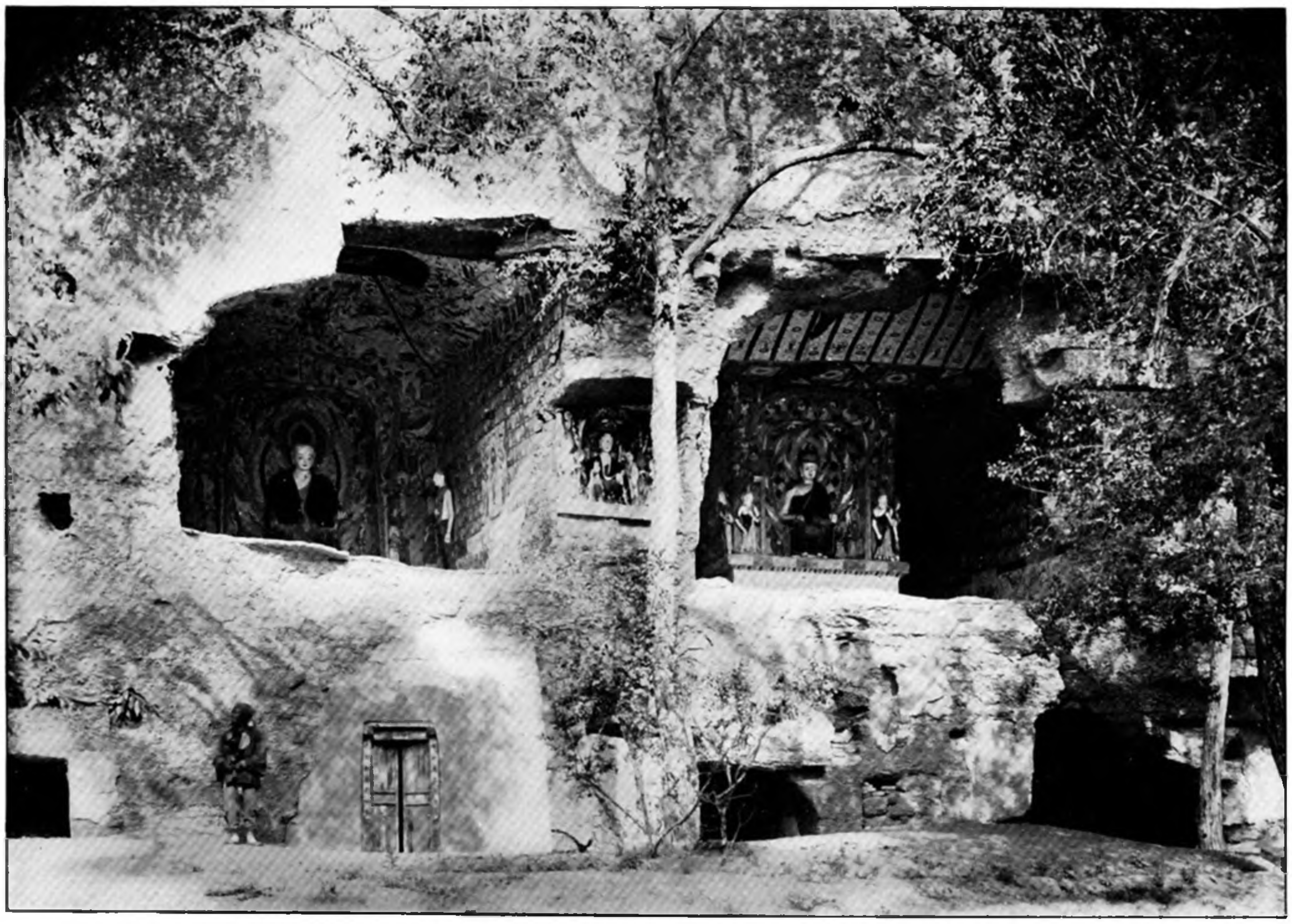


195. CAVE SHRINES ABOVE CH. III, 'CAVES OF THE THOUSAND BUDDHAS', TUN-HUANG.



196. CAVE SHRINES NEAR CH. VIII, 'CAVES OF THE THOUSAND BUDDHAS', TUN-HUANG.
The antechapels and porches of the cellas above have completely disappeared. The stucco images show recent restoration. Below are seen the porches, partially filled with sand, leading to other cellas.

The evidence of these restorations and of others which had evidently been effected elsewhere was enough to prove that traditions of Buddhist piety were deep rooted among the people of Tun-huang and by no means extinct even now, in spite of all the *péripéties* which this westernmost outpost of true China had suffered. It is of importance to note this tenacity of local Buddhist traditions and their special attachment to this sacred site. There are ample antiquarian grounds, as we shall see, to justify the belief that the period when the shrines of the Thousand Buddhas and the monastic establishments near them enjoyed special splendour and affluence lies as far back as T'ang rule. It was then that the empire assured effective protection to Tun-huang both against the Turks in the north and against the Tibetans on the south, and just then, too, that Buddhism flourished greatly in China. During the following four centuries and more, until the establishment of paramount Mongol dominion, these outlying marches had, except for relatively short intervals, been exposed to a succession of barbarian inroads.

Tenacity of Buddhist traditions at Tun-huang.

These political vicissitudes must have sadly affected the glory of the 'Thousand Buddhas'' abodes and the numbers of those who ministered to their worship. Yet, I think, there can be little doubt that it was the sight of these multitudinous shrines at the chief site of Tun-huang and the vivid first impressions there received of the cult paid to their denizens which had made Marco Polo put into his chapter on *Sachiu* a long and detailed account of the strange idolatrous customs of its people. We have had already occasion to quote its introductory notice. 'After you have travelled thirty days through the Desert, as I have described, you come to a city called SACHIU, lying between north-east and east; it belongs to the Great Kaan, and is in a province called TANGUT. The people are for the most part Idolaters, but there are also some Nestorian Christians and some Saracens. The Idolaters have a peculiar language, and are no traders, but live by their agriculture. They have a great many abbeys and minsters full of idols of sundry fashions, to which they pay great honour and reverence, worshipping them and sacrificing to them with much ado.' Then follows a lengthy description of various customs connected with worship and the disposal of the dead which, as Sir Henry Yule has duly pointed out, are essentially Chinese.[7] Throughout my travels in western Kan-su—Marco Polo calls it *Tangut*, the popular name derived from the Tangut, or Hsi-hsia, rule there prevailing until the Mongol conquest—I had plenty of opportunities to observe the maintenance of those customs among the local Chinese.

Marco Polo on Buddhist worship of Tun-huang.

But there was one aspect in the conditions of this sacred site where the break with the past seemed great. I mean the total absence of a resident monastic community and even of remains of such structures as might have served for its accommodation. It seemed impossible to believe that 'The Caves of the Thousand Buddhas', in T'ang times and later, could have lacked this essential portion or rather base of the Buddhist religious system. Subsequent discoveries were to place in my hands plentiful evidence, documentary and other, that Buddhist monastic life had once also flourished here. The causes for its complete disappearance I need not attempt to discuss. They are likely to be bound up closely with those gradual changes which have led Buddhism in most parts of China, as far as doctrine and organization are concerned, to become practically absorbed in the queer syncretistic medley of Chinese popular religion. It must suffice to note that at the time of my first visit I found this impressive array of cave-temples without a single resident guardian, and even the small cluster of pilgrims' quarters situated amidst some arbours and fields near the southern end of the site was only tenanted by a single young 'Ho-shang', a visitor from the plateaus of Tsaidam.

Absence of monastic community.

[7] Cf. Yule, *Marco Polo*, i. pp. 203 sqq.

Section II.—INSCRIPTIONS AT THE CAVES OF THE THOUSAND BUDDHAS

M. Chavannes on Ch'ien-fo-tung inscriptions.

If it is possible for me to follow up this rapid general survey of the Caves of the Thousand Buddhas by a brief account of the documentary evidence concerning its history that was available before my work there, I owe this advantage solely to the lucid translation and analysis of five important Chinese inscriptions preserved at the site which M. Chavannes has published, mainly from *estampages* brought back by M. Bonin.[1] M. Chavannes has clearly revealed the interesting sidelights which these inscriptions throw upon the political and ethnic conditions prevailing on these extreme north-west marches of China during T'ang times and also under the Mongol Yüan dynasty. Hence, referring for all the broader aspects of their contents to his introductory synopsis and his notes, I can confine myself to those points which have a direct bearing on the history and remains of the site.

Inscription of A. D. 698.

The oldest and, as M. Chavannes has duly emphasized, the most important of the inscriptions is dated in A. D. 698. It was accessible to him through its reproduction in the *Hsi yü shui tao chi*, a learned Chinese publication of the last century, and is, I believe, identical with the inscribed stēlē now seen in the cave-shrine Ch. III.[2] It appears to have been originally set up before the 'Cave of unequalled height', and eulogizes the repairs of the niches of Buddha images which were carried out by a certain personage bearing the family name of Li. In a passage of special interest it names the year corresponding to A. D. 366 as the one from which the earliest establishment of a Buddhist sanctuary at the 'Caves of the Thousand Buddhas' dates.

Tradition of first caves constructed.

In that year the Śramaṇa *Lo-tsun*, 'holding the pilgrim's staff in his hand across forests and plains, marched and arrived at this mountain; suddenly he saw an apparition in a flash of gold; in its shape there were a thousand Buddhas . . . he constructed a cave. Then there was the master of Dhyāna *Fa-liang*; coming from the East, he arrived here; in his turn he made himself another construction by the side of the cave of the master [*Lo*-]*tsun*. The erection of sacred edifices (saṃghārāma) commenced with these two monks. After that there was the prefect, the duke of *Chien-p'ing*, and *Wang* . . ., a native of *Tung-yang*. . . . Subsequently persons from the population of the whole district, one after another, made constructions.' A subsequent passage of the inscription confirms this by the statement: 'Lo-tsun and Fa-liang were the initiators: *Chien-p'ing* and *Tung-yang* enlarged the traces left by them. If one calculates the epochs, it is approximately four hundred years since then, and if one counts the habitations in the caves, one finds more than a thousand.'

Site first consecrated in A. D. 366.

It is clear from this record that the tradition of early T'ang times ascribed the first consecration of the site for Buddhist worship to the reign of Fu Chien (A. D. 357–84), who belonged to the short-lived Former Ch'in dynasty established at Hsi-an-fu. This date accords well, as M. Chavannes has shown, with what is otherwise known of the impetus received by Buddhist propaganda under that reign. Hence there is no reason to doubt the correctness of that tradition. But I found no indication enabling us definitely to locate the caves which it identified with the two shrines first established by Lo-tsun and Fa-liang. All that my knowledge of the site permits me to assert is that of the extant excavations the one containing the colossal seated Buddha image (south of Ch. XI in Plate 42) is certainly the highest. Whether this can be meant by the 'Cave of unequalled height' mentioned in the inscription is a question to which I shall have to recur presently.

[1] Cf. Chavannes, *Dix inscriptions chinoises de l'Asie centrale d'après les estampages de M. Ch.-E. Bonin*, 1902, pp. 10–16, 58–103 (in *Mémoires présentés par divers savants à l'Académie des Inscriptions et Belles-Lettres*, 1re série, tome xi, IIe partie, pp. 202–8, 250–95).

[2] Cf. Chavannes, *Dix inscriptions*, pp. 58 sqq.

The two inscriptions next in order of time are engraved on the obverse and reverse of a fine big slab of black marble which I found set up in the wholly modern antechapel of a large, much-restored shrine, Ch. xv. It lies just north of the one marked Ch. xvi in the plan, Plate 42, and its approach is seen on the extreme left of Fig. 191. The two inscriptions are separated by more than a century in time. The earlier one, dated in the year corresponding to A. D. 776, was 'engraved on stone to celebrate the merits accomplished by Li [T'ai-pin] 李太賓 a notable of the prefecture, a native of Lung-hsi, under the great T'ang dynasty'.[3] After extensive eulogies of this personage's ancestors, some of whom had held high office at Tun-huang, and his own religious virtues, the inscription relates how Li T'ai-pin, on returning from protracted travels of devotion, found a 'spot fit to receive sculptures'. It then proceeds to give an elaborate description of the Buddhist divine figures and scenes which this pious donor caused to be modelled or painted at the site, besides a hundred Stūpas. This long catalogue, apart from the interesting light it throws on the early importance attained in Buddhist cult by certain Tantric divinities which two Indian Śramaṇas introduced into China in the eighth century A. D.,[4] may yet prove to be of considerable value for the detailed iconographic interpretation of the frescoes at the Caves of the Thousand Buddhas and for that of the plentiful remains of pictorial art which a fortunate discovery enabled me to secure there. But, unluckily, the absence of any local indications and the thorough restoration accomplished in the shrine before which the stēlē is now set up leave but scant hope of any of Li T'ai-pin's sacred representations being exactly identified.

Inscription of A. D. 775. Li T'ai-pin's sacred gifts.

The later inscription on the back of Li T'ai-pin's stēlē bears the date of A. D. 894, and is, as its title indicates, intended to 'commemorate the meritorious act of repairing a construction accomplished by Mr. Li, of Lung-hsi, a member of the imperial family of the T'ang'.[5] It is a rhetorical composition, setting forth at great length the distinctions of this defunct scion of the imperial family and of several of his nearest relatives. It furnishes historically useful information about Chang I-ch'ao, the local chief of Tun-huang, who was his father-in-law, and who after a century of Tibetan predominance over Tun-huang and the adjoining tracts (A. D. 757–850) submitted to the T'ang, and thus enabled the imperial Chinese power once more for a time to assert itself along the natural passage leading towards the Western regions.[6] But, apart from such historical glimpses of local interest and the sidelight incidentally thrown on the close relations which Buddhist monastic communities of Tun-huang maintained at that period with Tibet,[7] the inscription does not assist archaeological inquiry concerning the site.

Historical data in inscription of A. D. 894.

It is different with the last two inscriptions, which, as M. Chavannes has duly pointed out, are very closely connected with each other. For a reason to be discussed presently it is important to note that I found both of them placed together in the antechapel, constructed of wood and manifestly modern, of the cave-temple marked Ch. xi in Plate 42. This is situated, next but one, to the north of the cave containing the colossal clay statue of a seated Buddha already referred to. The two stēlēs, dated in the years 1348 and 1351 respectively, were set up by Shou-lang 守朗, a monk from a temple in the province of Shan-hsi, in order to commemorate religious foundations attributed to Sulaimān, king of Hsi-ning, as the principal donor. This prince, as M. Chavannes has shown, is identical with the Su-lai-man 速來蠻 who is mentioned by the Annals of the Yüan, or Mongol, dynasty as having been installed in A.D. 1329, and to whom, under a slightly different representation of his name, reference is also made there as a descendant of Chingis Khān.[8]

Inscription recording Sulaimān's foundations.

[3] Cf. Chavannes, *Dix inscriptions*, pp. 60 sqq.
[4] See *ibid.*, p. 10.
[5] Cf. Chavannes, *ibid.*, pp. 77 sqq.
[6] Cf. Chavannes, *Dix inscriptions*, pp. 12 sq., 80, note 1.
[7] See Chavannes, *ibid.*, p. 85, with note 4.
[8] Cf. Chavannes, *ibid.*, pp. 102 sq.

This association of a Mongol prince bearing a Muhammadan name with works of Buddhist piety has an historical interest of its own.

Inscription of A. D. 1348.

The partly broken slab bearing the inscription of A.D. 1348 has in its centre a relievo representation of a Dhyāni-bodhisattva, identified by M. Chavannes with Avalokiteśvara.[9] Above it and on both sides the sacred formula *Oṃ maṇi padme hūṃ* is engraved in six different scripts: Devanāgarī, Tibetan, Uigur-Turkī, Mongol, Hsi-hsia or Tangutan, Chinese. The inscription below contains a record of the erection of the stēlē and a list naming the personages who 'have presided at the meritorious work', after Sulaimān, king of Hsi-ning, mainly members of the royal house and notables, most of them probably connected with Tun-huang. The stēlē may have an archaeological value because at its head in big characters it bears the name of the 'Cave of unequalled height' 莫高窟. This is taken by M. Chavannes as an indication that it was set up at this cave.[9a] Considering that the shrine Ch. XI, in which the slab is now found, almost immediately adjoins the cave which contains the image of the colossal seated Buddha, and that this certainly is the highest now to be seen at Ch'ien-fo-tung, the conclusion suggests itself that this great excavation is meant by the 'Cave of unequalled height', and that the stone was originally placed there. The fact of its lying loose and partially broken, whereas the other inscribed slab of A.D. 1351 is intact and still upright in what seems to be its original stone socket, might be taken to support this. We have already seen that the inscribed stone of A.D. 698, now at Ch. III, indicates the 'Cave of unequalled height' as the one which, according to the tradition of that period, marked the first shrine constructed at the site by Lo-tsun.

The 'Cave of unequalled height'.

Inscription of A.D. 1351 on temple reconstruction.

The stēlē dated in the year A.D. 1351 supplements the former inscription in a very useful fashion and also furnishes information of direct archaeological interest for the site.[10] It declares itself in its heading as 'a notice on the reconstruction of the *Huang-ch'ing* 皇慶 temple.' After an exordium which records the composition of the inscription by one Liu Ch'i, 'director of literary studies in the Sha-chou district', we are informed: 'The *Huang-ch'ing* temple of Sha-chou had already passed through a great number of years and months since the T'ang and Sung [dynasties] to the present day; the wars had pillaged it and conflagrations had reduced it to ashes. . . . Su-lai-man, king of Hsi-ning, who greatly honoured the Buddhist religion, gave gold, pieces of silk, colours, rice, food-stuffs, and timber for construction, and ordered artisans to rebuild it. He charged the monk Shou-lang to direct this affair; besides Shou-lang kept a register to inscribe in it the list [of donors], in order to help towards the completion of the work. The statues of Buddhas, the mural paintings, and the roofings found themselves entirely renewed in their full glory.' Sulaimān having died in the meantime, the list of donors which follows names his successor Ya-han-sha, who in the inscription of A.D. 1348 figures as heir-presumptive, along with members of the family as well as numerous officials and others of Tun-huang.

Evidence of successive restorations of shrines.

The story here recorded of the ravages which the Huang-ch'ing temple had suffered in the centuries preceding the Mongol period, of the extensive repairs then effected, and of the method by which their cost was provided, affords a typical illustration of the manifold successive restorations which most, if not all, of the older and more important cave-temples are likely to have undergone. With the latest instance of such restoring activity I had special occasion to become familiar, as the following pages will show, and the varying stages of decay observed elsewhere in antechapels and other adjoining structures suggested that restoration has never quite ceased. In the case of the shrine Ch. XI, where the last two inscriptions are now found, modern restoration is attested by

[9] See Chavannes, *Dix inscriptions*, pp. 96 sqq. and plate.

[9a] But see, for another interpretation of the term *Mo-kao-k'u*, the remarks of M. Pelliot, *B.É.F.E.O.*, viii. p. 521, who takes it for a designation of the whole site. Thus Dr. Giles in his *Tun-huang lu*, *J.R.A.S.*, 1914, p. 707.

[10] Cf. Chavannes, *Dix inscriptions*, pp. 99 sqq.

the perfect state of the antechapel, substantially built of timber and elaborately decorated. Most of the fresco-work within its cella, however, seemed decidedly old, and there is no apparent reason to be urged against its identity with the Huang-ch'ing temple, the restoration of which the inscription of A.D. 1351 commemorated. At the same time, the fact that this antechapel now also contains the slab of A.D. 1348, which, as indicated above, may have come from the neighbouring cave-temple of the colossal seated Buddha, must warn us against accepting this *a priori* likely identification as conclusive.[11] Unfortunately, the structural additions in front have rendered the interior both here and at the last-named cave-temple so dark that photographic reproduction of the mural paintings without artificial light was impracticable, and even their close study difficult within the available time.

SECTION III.—WANG TAO-SHIH AND HIS RESTORED TEMPLE

The hurried preliminary visit I had paid, soon after my first arrival in March, to the Caves of the Thousand Buddhas sufficed to impress me with the abundance of interesting materials which their fully accessible remains offered for the study of Buddhist art. Yet there was even then in view for me another and more pressing task which was bound to engross my attention at the outset.

Rumour of discovery of manuscript hoard.

It was at Tun-huang and through Zahīd Beg, the intelligent Turkī trader of Urumchi who had established himself there at the head of a small colony of Muhammadan exiles from Hsin-chiang, that the first vague rumour had reached me of a great mass of ancient manuscripts which had been discovered by chance several years before hidden away in one of the cave-temples. There these treasures were said to have been locked up again by official order in charge of the Taoist priest who had come upon them. Zahīd Bēg's assertion that some of these manuscripts were not in Chinese writing had naturally made me still keener to ascertain exact details. The result of Chiang Ssŭ-yeh's cautious inquiries seemed to support the rumour, and in close council with him I had carefully considered the question how best to gain access to the find.

Story of Wang Tao-shih's discovery.

On my first visit to the site the Taoist priest was away, engaged apparently with his two acolytes on a begging tour in the oasis. Nor would it, perhaps, have been wise to attempt starting operations then at once. But fortunately the young 'Ho-shang' of Tangutan extraction already referred to, then the only dweller at the site, proved to be possessed of useful local knowledge, and it did not take Chiang Ssŭ-yeh long to extract from him some interesting details. The place of discovery of the manuscript hoard was a large shrine (Ch. I in plan, Plate 42) near the northern end of the main group of caves. Its gaily painted outer structures bore evidence of extensive recent restoration, the result of pious labours started and maintained by Wang, the *Tao-shih*, or Taoist priest, who had established himself here some seven years before. The entrance to the cave-temple had been formerly blocked by fallen rock débris and drift-sand, as was still partially the case at several of the caves situated at the foot of the cliff further south. While restorations were slowly being carried on in the temple cella and the place now occupied by its antechapel, the labourers engaged had noticed a crack in the frescoed wall of the passage connecting the two. An opening was thus discovered that led to a recess or small chamber excavated from the rock behind the stuccoed north wall of the passage (Plate 43; Fig. 200).

Manuscript rolls, written in Chinese characters but in a non-Chinese language, were said to have filled the recess completely. Their total quantity was supposed to be so great as to make up

[11] M. Chavannes, *Dix inscriptions*, p. 99, mentions that Hsü Sung, the author of the *Hsi yü shui tao chi*, speaks of the Huang-ch'ing temple inscription of A.D. 1351 as being found 'outside the cave of Mañjuśrī'. I regret that I did not ascertain on the spot whether this designation is applied at present to the shrine Ch. XI.

Manuscripts locked up in place of discovery.

several cart-loads. News of the discovery having reached distant Lan-chou, specimens of the manuscripts were asked for from provincial headquarters. Ultimately orders were supposed to have come from the Viceroy of Kan-su to restore the whole of the find to its original place of deposit. So now this strange hoard of undeciphered manuscripts was declared to be kept by the Tao-shih behind the carefully locked door with which the hidden recess had been provided since its first discovery.

Specimen from find produced.

In the absence of the priest it was impossible to pursue these preliminary inquiries further. But I lost no time in visiting the alleged place of discovery. Fortunately, the young Ho-shang's spiritual guide, a Tibetan monk then also away on a begging tour, had borrowed one of the manuscripts in order to give additional lustre to a little private chapel of his own that he had improvised at his temporary abode in the tumble-down pilgrims' rest-house. The young monk was persuaded by Chiang Ssŭ-yeh to bring us this specimen. It was a beautifully preserved roll of paper about 10 inches high, and, when we unfolded it in front of the original hiding-place, proved to be about 15 yards long. The paper, yellowish in tint, looked remarkably strong and fresh. But in a climate so dry and in a carefully sheltered hiding-place it was impossible to judge age from mere outward appearance, and with its fine texture and carefully smoothed surface it looked to me decidedly old.

Manuscript roll of Buddhist Sūtra text.

Chiang Ssŭ-yeh had the same impression of the writing, which was very clear and showed excellent penmanship. It was, indeed, Chinese, and so beyond doubt was the language. But my learned secretary frankly acknowledged that on cursory reading he could not make out any connected sense in the text. This, however, soon found its explanation when, in frequently repeated formulas read out by Chiang, I recognized such words as *P'u-sa* and *p'o-lo-mi*, the familiar Chinese transcripts of Sanskrit *Bodhisattva* and *pāramitā*. I knew how utterly strange the phraseology of Chinese Buddhism is to the average *literatus*, and there could be no possible doubt about the text being Buddhist even before Chiang Ssŭ-yeh, on the roll having been completely unfolded, had discovered that it was described in the colophon as a *ching* 經, or Sūtra. Thus the rapid inspection of this single specimen suggested that the reported great manuscript deposit might prove to be largely of Buddhist character. At the same time the fact that the text was written on a roll, and not in the 'concertina' or book form which has prevailed in China ever since block printing became common about the beginning of the Sung period (A. D. 960),[1] seemed to raise a strong presumption as to the early date of the deposit. All further speculation had to be put off until I should secure access to the whole of the hidden library. It was enough encouragement at the time to find its existence confirmed.

Endeavours to gain access to deposit.

The thought of the great store of old manuscripts awaiting exploration drew me back to the Caves of the Thousand Buddhas with the strength of a hidden magnet. But by the time at which my return to the site became possible I had learned enough of the local conditions of Tun-huang to realize that there were good reasons for caution in my first endeavours to secure access to the Tao-shih's jealously guarded treasures. The fact alone that the cave-temples, notwithstanding all apparent decay, were still real places of worship 'in being' would, by every consideration of prudence, impose obvious limitations upon my archaeological activity there. But what my sagacious secretary had meanwhile gathered about the character and ways of the monk holding charge of that ancient hidden store was a further warning to me to feel my way at first with discretion and studied slowness. Chiang Ssŭ-yeh, however, had succeeded in inducing Wang Tao-shih to await my arrival at the caves instead of starting at once, when the great annual fête there had concluded, on one of his usual tours in the district to collect temple subscriptions, etc. It was encouraging, too,

[1] [Dr. L. Giles informs me that the earliest specimens of Sung printing in the British Museum are in 'concertina' form.]

to feel that, apart from the genuine interest which Wang Ta-lao-yeh, the learned sub-prefect of Tun-huang, had from the first shown in my antiquarian labours, I could to some extent rely also on the favourable impression which gradually had spread among the people of Tun-huang about my scholarly aims and methods.

Return to 'Thousand Buddhas'.

When by May 21 I returned to the caves for the eagerly planned operations, it was satisfactory to find the site completely deserted but for Wang Tao-shih with his two acolyte-servitors and a humble Tibetan Lāma, knowing no Chinese and obviously harmless. The Tao-shih had come to welcome me at what for most of the year he might well claim as sacred ground entrusted to his own exclusive care. He looked a very curious figure, extremely shy and nervous, with a face bearing an occasional furtive expression of cunning which was far from encouraging (Fig. 198). It was clear from the first that he would be a difficult person to handle. Purposely avoiding any long interview with him, I started next morning what was to be ostensibly the main object of my stay at the site, a survey of the principal shrines and the photographing of the more notable frescoes. While thus engaged at the northernmost caves near the great shrine restored by Wang Tao-shih, I cast a glance at the entrance passage, behind the wall of which the manuscript hoard was declared to have been discovered and to be still kept (Fig. 200). To my dismay I now found the narrow opening of the recess, about 5 feet above the floor of the passage, completely walled up with brick-work. It seemed like a special precaution taken against my inquisitive eyes. Necessarily the sight recalled to my mind the similar device by which the Jain monks at Jesalmīr had endeavoured to keep the store of ancient palm-leaf manuscripts in their temple vault hidden from Professor Bühler.

First overtures to Wang Tao-shih.

The chief task at the beginning was to make sure that I should be allowed to see the whole of the manuscripts in their original place of deposit. With a view to sounding the priest in a confidential fashion about the facilities to be given for this purpose, I had dispatched Chiang Ssŭ-yeh to another cave-temple which Wang had partially restored and annexed as his living quarters. In spite of the Ssŭ-yeh's tactful diplomacy, the negotiations proceeded very slowly. The promise of a liberal donation for his work of pious restoration had, indeed, the initial effect of inducing the priest to explain that the walling-up of the door was a precaution primarily taken against the curiosity of the pilgrims who had recently flocked to the site in their thousands. But, being wary and of a suspicious mind, he was careful to evade any promise about showing the collection to us as a whole. All that he would agree to, and that with manifold reservations, was to let me eventually see some manuscript specimens within convenient reach of his hands. A hint cautiously put forward by my zealous secretary about the possibility of my wishing, perhaps, to acquire one or other of these specimens had caused such manifestly genuine perturbation to the Tao-shih that the subject had promptly to be dropped.

Official inquiry into find.

However, in one direction at least some reassuring information emerged from these hours of diplomatic converse. From statements heard by us at Tun-huang it had appeared likely that, when the great find of manuscripts had been officially reported through the Tao-t'ai at Su-chou to the Viceroy of Kan-su, orders had been issued from the latter's Ya-mên for the transmission of specimens, and subsequently for the safe keeping of the whole collection. Fortunately, Chiang's apprehension about an official inventory having been taken on that occasion was dispelled by what the Tao-shih in a talkative mood let drop in conversation. Some rolls of Chinese texts, apparently Buddhist, had indeed been taken from him and sent to the Viceregal Ya-mên at Lan-chou. But they had failed to attract any interest there, and to Wang's undisguised chagrin no further notice had been taken of his treasured old manuscripts or, indeed, of his pious labours which had led to their discovery. Officialdom had been content with a rough statement that the manuscripts would

make up seven cart-loads, and, evidently grudging the cost of transport or the trouble of close examination, had left the whole undisturbed in charge of the Tao-shih, as self-constituted guardian of the temple.

First visit to Wang Tao-shih.

Chiang's report, nevertheless, gave reason to fear that the priest's peculiar disposition would prove a serious obstacle to the realization of my hopes. The temptation of money would manifestly not offer an adequate means for overcoming his scruples, whether prompted by religious feeling or fear of popular resentment—or, as seemed likely, by both. It seemed best for me to study his case in person. So, accompanied by the Ssŭ-yeh, I proceeded to pay my formal visit to the Tao-shih and asked to be shown over his restored cave-temple. Ever since he had first come to the sacred site, some eight years earlier, it had been the chief care as well as the mainstay of his Tun-huang existence. Hence my request was met with alacrity.

Wang Tao-shih's labours of restoration.

As he took me through the airy front loggia of the shrine and the lofty antechapel, substantially built of timber and brickwork, I expressed due admiration for the lavish gilding and painting. As we proceeded through the high passage or porch giving access and light to the cella, it seemed difficult not to fix my attention on the spot where, close to the outer end on the right, an ugly patch of brickwork then still masked the door of the hidden chapel (Fig. 200; Plate 43). But instead of asking questions of my pious guide as to its contents, I thought it more useful to display my interest in what his zeal had accomplished in the clearing of the cella and in its sacred adornment. How thorough the restoration had been as regards the sculptures is shown by the photograph in Fig. 200. Within the cella, measuring about 56 by 46 feet, a horseshoe-shaped dais, old but replastered, displayed a collection of new clay images, all over life-size and more ungainly than any, I thought, to be seen in these caves.

The fresco decoration of the cella, consisting chiefly of large diapers of seated Buddhas on the walls and of floral patterns on the ceiling, had fared better and remained well preserved for the most part. Though obviously not as old and artistic as in some of the other large temples, this pictorial work of the cella caused the gaudy coarseness of the statuary and the other modern additions to stand out in painful contrast. But this could not prevent me from being impressed with all that the humble monk's zeal had accomplished. His devotion to this shrine and to the task of religious merit which he had set himself in restoring it was unmistakably genuine.

Wang Tao-shih's pious efforts.

Having come to the sacred site as a poor friendless mendicant from Shan-hsi, some eight years before my visit, he had devoted himself to restoring this great and badly decayed temple to what he conceived to have been its original glory. Masses of fallen conglomerate then covered the floor of the antechapel and almost completely blocked the mouth of the passage. Heavy drift-sand filled the rest and a considerable portion of the cella. I could not help being touched by the thought of the enthusiasm, perseverance, and efforts which it must have cost the quaint, frail-looking priest by my side to beg all the money needed for the labour of clearing out the sand from the temple and for the substantial reconstructions, as besides the antechapel there were several stories of temple halls solidly built above of hard brick and timber, right to the top of the cliff. His list of charitable subscriptions and his accounts, proudly produced later on to Chiang Ssŭ-yeh, showed in fact quite a respectable total, laboriously collected during years and all spent upon these labours of piety. That he spent next to nothing on his person or private concerns was clear from the way in which he lived with his two devoted acolytes and from all that Chiang heard about him at Tun-huang.

Wang Tao-shih's character.

Wang Tao-shih's ignorance of all that constitutes traditional Chinese scholarship had soon been correctly diagnosed by Chiang Ssŭ-yeh. So I knew that no useful purpose could be served by talking to him about my archaeological interests, about the value of first-hand materials for historical

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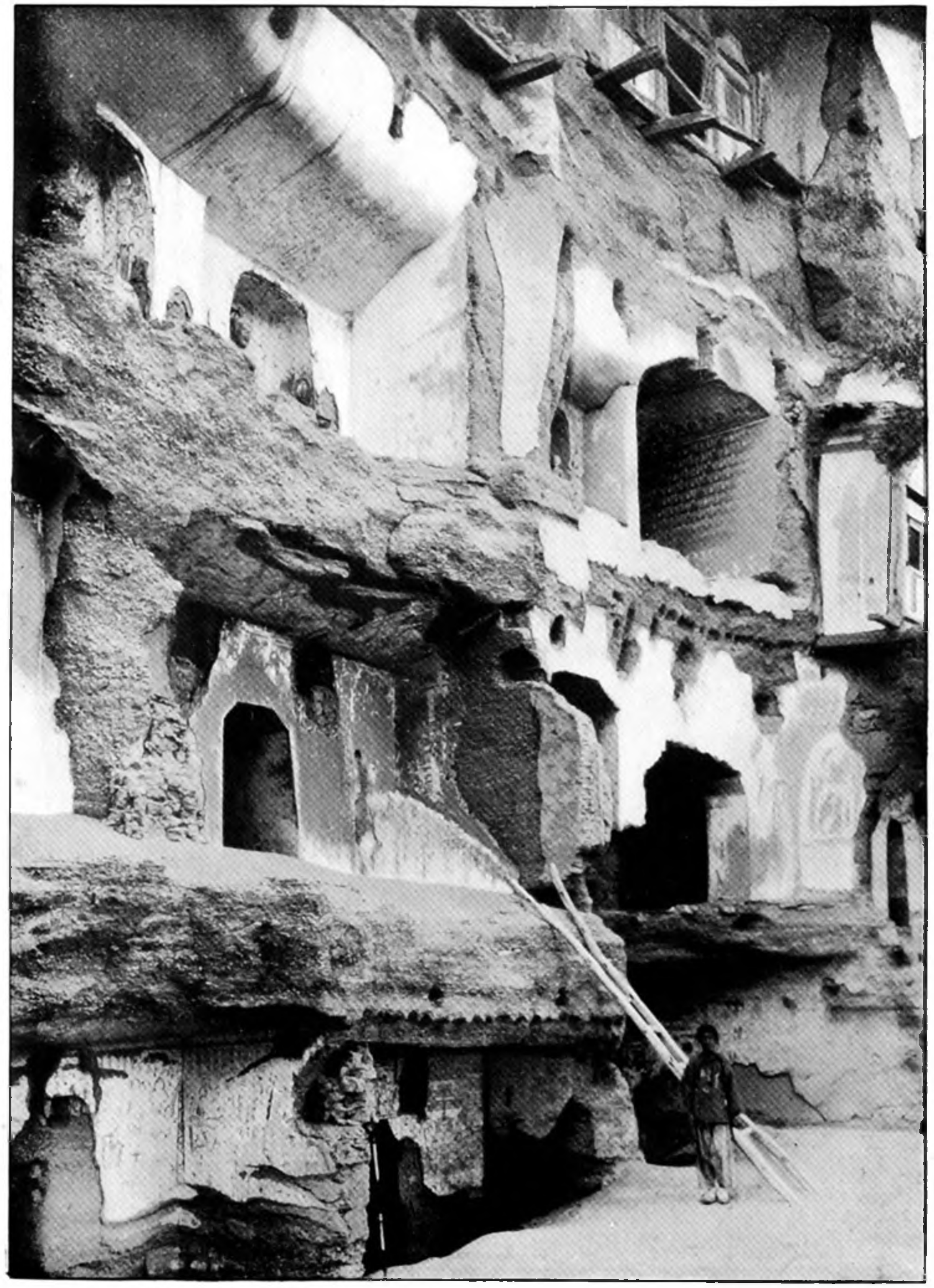
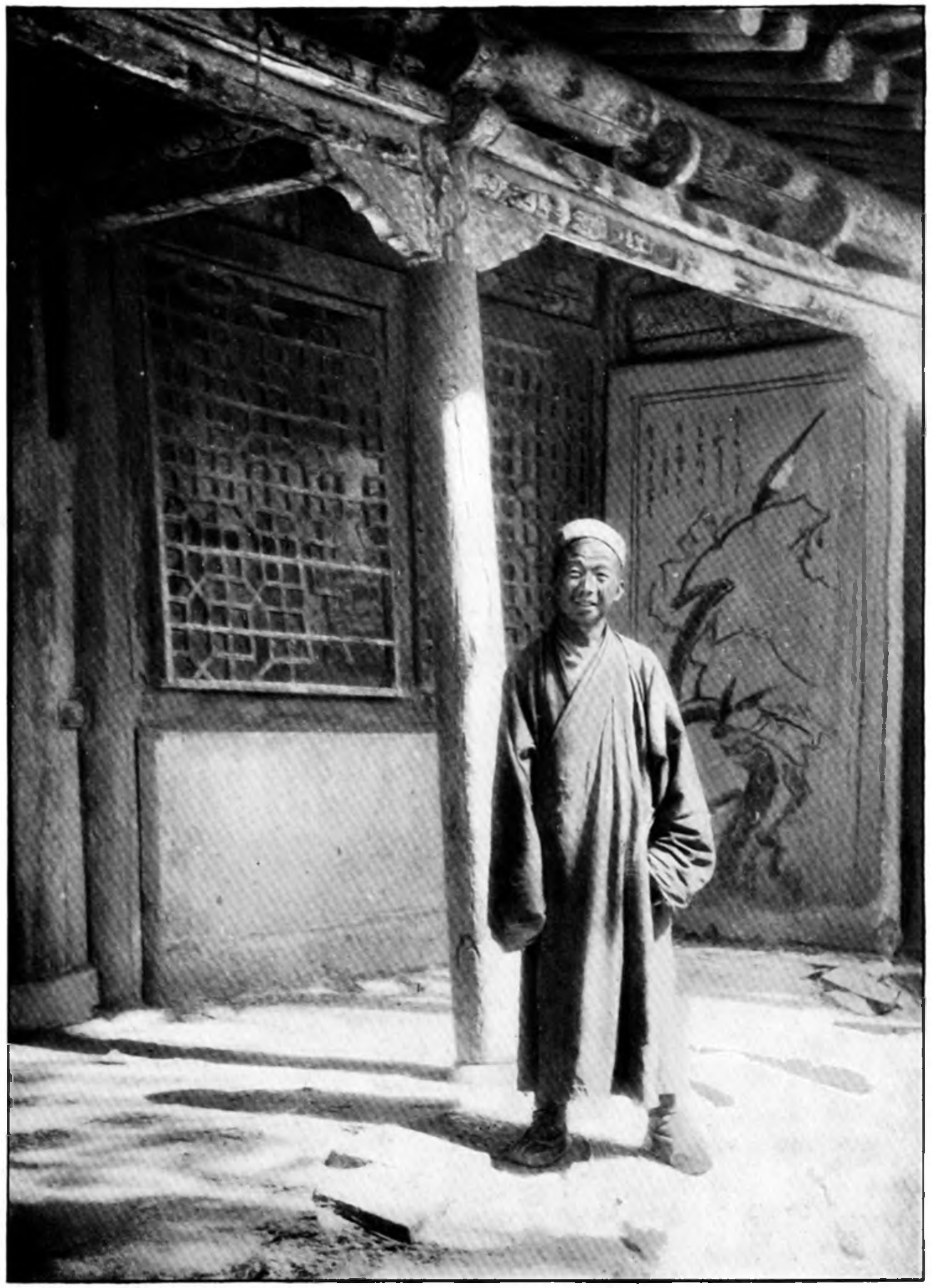
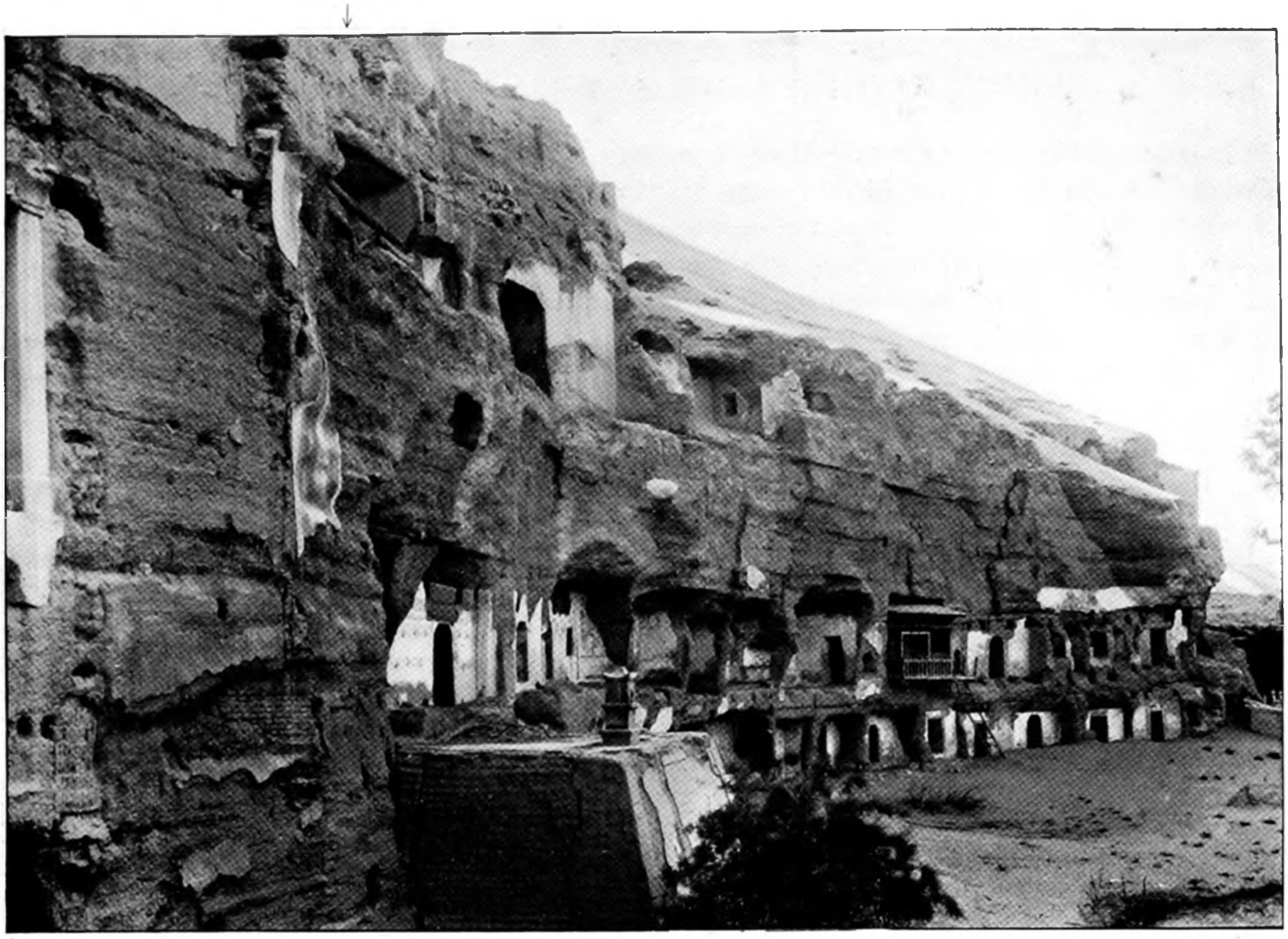


197. ROWS OF CAVE SHRINES, SOME SHOWING DECAYED PORCHES, NEAR CH. IX, CH'IEN-FO-TUNG, TUN-HUANG.

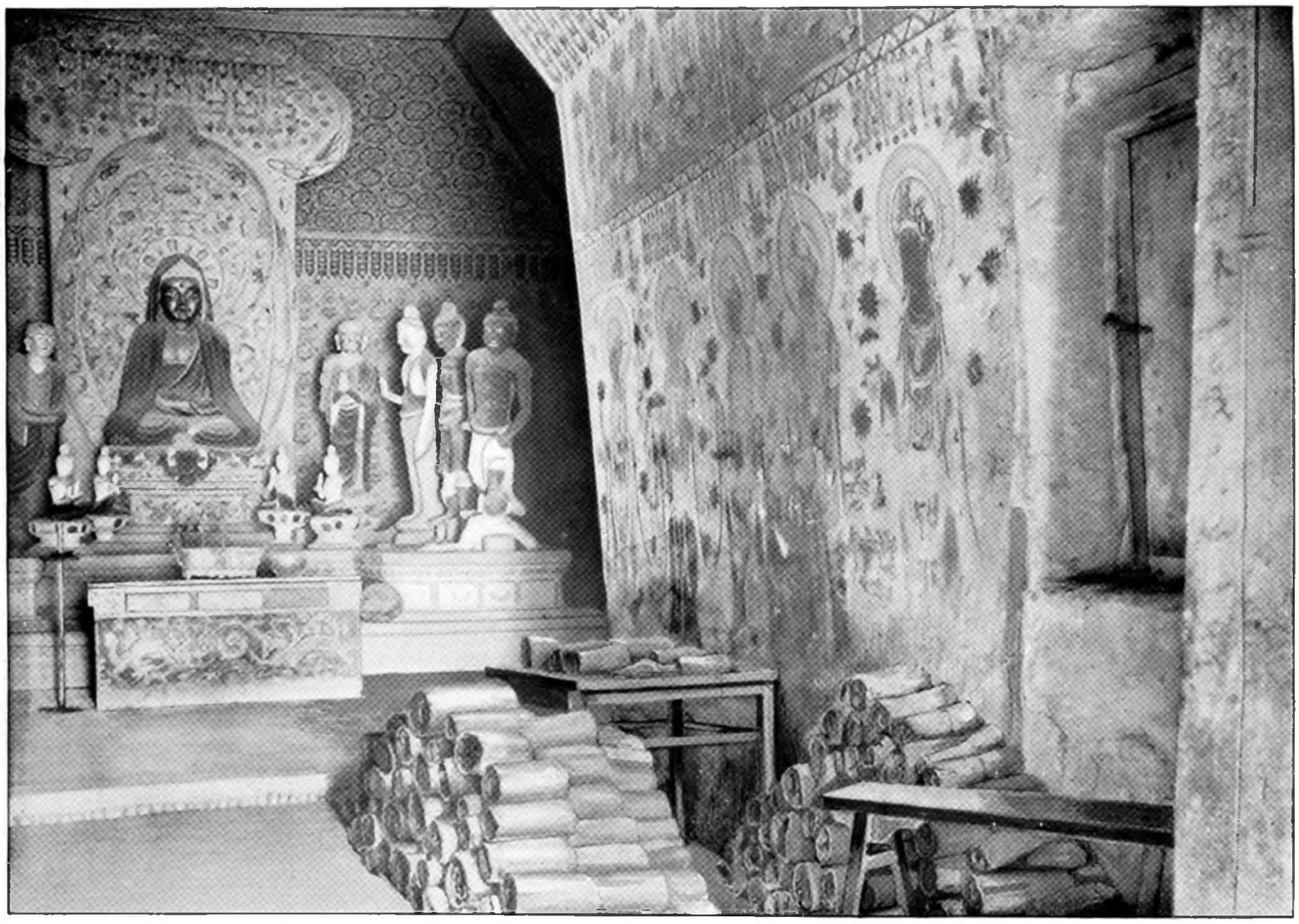


198. WANG TAO-SHIH, TAOIST PRIEST AT THE 'CAVES OF THE THOUSAND BUDDHAS'.

Cave Ch. XII
↓



199. ROWS OF SMALL CAVE SHRINES ADJOINING CAVE CH. XII NORTHWARD, CH'IEN-FO-TUNG, TUN-HUANG.
On extreme left, portion of middle porch, giving light to cave of colossal seated Buddha



200. CELLA AND PORCH OF CAVE TEMPLE CH. I, PARTIALLY RESTORED, CH'IEN-FO-TUNG, TUN-HUANG.
On extreme right the locked door leading to rock-cut chapel, previously walled-up, where the hidden deposit of MSS., etc. was discovered.

and antiquarian research, and the like, however helpful I had always found such topics for securing the friendly interest and good will of educated Chinese officials. But there was another source of aid to fall back upon—the memory of Hsüan-tsang, an appeal to which had never failed to secure me a sympathetic hearing alike among the learned and the simple. The very presence of this quaint priest, embodying in his person a compound as it were of pious zeal, naïve ignorance, and astute tenacity of purpose, was bound to recall those early Buddhist pilgrims from China who, simple in mind but strong in faith and in superstition, had made their way to India, braving all difficulties and risks. Wang Tao-shih, too, was likely to have heard of my attachment to the saintly traveller whom I was accustomed to claim as my Chinese patron saint.

Appeal to Hsüan-tsang's memory.

So, amidst the tokens of lingering Buddhist worship surrounding us in the temple cella, I proceeded to tell the Taoist priest of my devotion to Hsüan-tsang: how I had followed his footsteps from India across inhospitable mountains and deserts; how I had traced the ruined sites of many sanctuaries he had visited and described; and so on. However poor my Chinese, it was a familiar theme for me to expatiate upon, and, as always, I found my efforts eagerly seconded by Chiang Ssŭ-yeh, elaborating details and making the most of my knowledge of Hsüan-tsang's authentic records and of the distant scenes of his travels. There was encouragement in the gleam of lively interest which I caught in the Tao-shih's eyes, otherwise shy and fitful, and soon the impression made upon him was plainly readable in his generally puzzling countenance.

The priest's admiration for *T'ang-sêng*.

The priest, though poorly versed in, and indifferent to, things Buddhist, proved in fact quite as ardent an admirer in his own way of *T'ang-sêng* 唐僧, 'the great monk of the T'ang', as I am in another. Of this fortunate link between us I had ocular evidence to assure me when he took me outside into the spacious loggia he had built in front of the temple, and proudly showed the series of quaint but spirited paintings representing scenes from the great pilgrim's marvellous adventures with which he had caused its walls to be decorated by a local artist.[2] The fantastic legends there depicted were just those which have transformed Hsüan-tsang in modern popular belief throughout China into a sort of saintly Munchausen. The fact that they are not to be found in the pilgrim's genuine *Memoirs of the Western Regions* and biography could in no way detract from the satisfaction with which I listened to my credulous cicerone expounding in voluble talk the wonderful stories of travel illustrated in the successive panels.[3]

Picture illustrating Hsüan-tsang's story.

There was one picture in particular in which I saw good reason to display a marked interest, though it was not till later that I appealed again and again to the moral it pointed. It showed a scene which I thought at the time curiously adapted to my own case. There was T'ang-sêng standing on the bank of a violent torrent, and beside him his faithful steed laden with big bundles of manuscripts. A large turtle was to be seen swimming towards him to help in ferrying across

[2] For reproductions of two of these fresco panels, each comprising four different scenes, see *Desert Cathay*, ii. Figs. 189, 190.

[3] The apocryphal *Hsi-yu-chi* which embodies these tales seems to be a widely known story-book commanding considerable popularity in the westernmost parts of China and probably elsewhere, too. It certainly deserves the attention of a critical analysis on the part of European Sinologists interested in the later growth of Chinese Buddhism and folklore.

It would be of particular interest to examine to what extent the extravagant exploits foisted upon the great pilgrim by popular legend have their ultimate source in the miraculous stories which Hsüan-tsang himself reproduced in his *Memoirs* as he had heard them from his priestly guides at various sacred sites in India. If this assumption were right—and some of the tales, as I understood them, seem to support it—it might be taken as a kind of just penalty imposed by Fate upon the pious traveller for the *penchant* he undoubtedly shows in his *Memoirs* for the credulous if faithful reproduction of all legends, however improbable, as told to him by Indian local priests, etc.

[Mr. J. L. Smith, of H.B.M.'s Chinese Consular service, has kindly called my attention to the notice of the apocryphal *Hsi-yu-chi*, contained in Mr. S. Couling's *Encyclopaedia Sinica*, pp. 241 sq., and the abstract translation of the story published by the late Dr. Timothy Richard under the title *A Mission to Heaven*, 1913.]

such a precious burden. Here was clearly a reference to the twenty pony-loads of sacred Buddhist texts which the historical pilgrim managed to bring safely with him from India to China, and also to the great risks to which they had necessarily been exposed in crossing the many rivers and mountain torrents on the long journey—all facts duly related in his authentic *Life*.[4] But the question remained whether the Tao-shih would read aright the obvious lesson here illustrated and be willing to acquire spiritual merit by letting me take back to India some of the ancient manuscripts which chance had placed in his keeping.

[4] Cf. Julien, *Vie*, pp. 263, 275, 296; Beal, *Life*, pp. 192, 200, 214. An incident, such as may, perhaps, be supposed to have given rise to the story illustrated by the scene described above, can be found in what the *Life* of Hsüan-tsang relates of his crossing the Indus at Wu-to-chia-han-ch'a (Skr. Udabhāṇḍa, the present Ūnd; see Stein, *Rājat.* ii. p. 338, on v. 152–5), when 'fifty manuscript copies of Sūtras' were lost from the boat to which the 'Master of the Law' had entrusted the sacred books and other precious acquisitions.

A similar risk was encountered by the pious traveller in the Tangi-tar gorge, where his elephant was drowned, through the adventure discussed above, p. 79.

CHAPTER XXII

EXPLORATION OF A WALLED-UP HOARD

Section I.—FIRST OPENING OF HIDDEN CHAPEL

Chinese manuscript specimens delivered in secret.

All-important as was the question suggested at the close of the preceding section, it would not have been safe at the time to approach Wang Tao-shih with it. So I left Chiang Ssŭ-yeh behind to make the most of the favourable impression produced, and to urge an early loan of the promised manuscript specimens. But the priest had again become timorous and reserved, and vaguely postponed their delivery until later. So I remained in suspense until late that night Chiang, in silent elation, came to my tent with a small bundle of Chinese manuscript rolls which the Tao-shih had just brought him in secret, carefully hidden beneath his flowing black robe, as the first of the promised 'specimens'. The rolls, as regards writing and paper, looked as old as the one which the young Ho-shang had shown us on my first visit in March, and probably contained Buddhist canonical texts; but my zealous secretary, ever cautious in scholarly matters, asked for time to make sure of their character.

Rolls containing versions by Hsüan-tsang.

By daybreak next morning Chiang came to inform me, with an expression of mingled amazement and triumph, that these fine rolls contained Chinese versions of Buddhist Sūtras (*ching*) which the colophons distinctly declared to have been first brought from India and translated by Hsüan-tsang. He was much impressed by the strange chance which had thus at the very outset placed in our hands texts bearing the name of Hsüan-tsang and undoubtedly early copies of his labours as a sacred translator. I, too, was struck by this auspicious omen—especially when I realized how useful an argument with the timorous Tao-shih was supplied by the interpretation which Chiang Ssŭ-yeh unhesitatingly put upon it. Surely it was 'T'ang-sêng' himself, so he declared with a tone which had a sound of genuine superstitious faith, very different from his usual scepticism, who at the opportune moment had revealed the hiding-place of all those manuscripts to an ignorant priest in order that I, his admirer and disciple from distant India, might find a fitting antiquarian reward awaiting me on the westernmost confines of China.

Tao-shih impressed by portent.

Wang Tao-shih in his ignorance could have had no inkling, when he picked up those specimens, of their connexion with Hsüan-tsang's sacred memory. Chiang Ssŭ-yeh realized at once that this discovery was bound to impress the credulous priest as a special interposition of the Arhat, my 'patron Saint', on my behalf. So he hastened away to carry the news to the Tao-shih, and on the strength of this manifest proof of T'ang-sêng's support to urge afresh the plea for free access to the hoard of hidden manuscripts. The effect was such as we both hoped for, and shortly Chiang came back convinced that the portent would work its spell. When after a few hours he returned to the Tao-shih's temple, he found the wall blocking the entrance to the recess in the passage removed, and, on its door being opened by the priest, he caught a glimpse of a small room crammed full to the roof with bundles of manuscripts.

All through the morning I had purposely kept away from the Tao-shih's quarters and temple. But on getting this news I could no longer restrain my impatience to see the great hoard myself.

First sight of manuscript hoard.

It was a hot day, and no one stirring abroad, when accompanied by Chiang I went to the temple. There I found Wang Tao-shih evidently not yet quite relieved of his scruples and nervous apprehensions. But under the influence of that quasi-divine hint he now summoned up courage to open before me the rough door closing the narrow entrance which led from the north side of the passage or porch into the rock-carved recess (Fig. 200). The sight disclosed within made my eyes open wide. Heaped up in closely packed layers, but without any order, there appeared in the dim light of the priest's flickering lamp a solid mass of manuscript bundles rising to a height of nearly 10 feet. They filled, as subsequent measurement showed, close on 500 cubic feet, the size of the small room or chapel being about 9 feet square (Plate 43) and the area left clear within just sufficient for two people to stand in.

Necessity of caution.

It was obvious that any proper examination of the manuscripts would be impossible in this 'black hole', and also that the digging out for this purpose of all its contents would cost time and a good deal of physical labour. It would have been premature and worse than useless at the time to suggest clearing out all the bundles into the cella of the temple, where they might have been examined at ease; for Wang Tao-shih was still much oppressed by fears of losing his position and patrons, in fact all the hard-won results of his pious labours at the sacred site, in consequence of the rumours which any casual observers might spread against him in the oasis. Occasional pilgrims were likely to drop in even during this 'slack season' of the site, and it would have been imprudent for the Tao-shih to keep his shrine closed against such. All we could secure for the present was that he would take out a bundle or two at a time and let us look rapidly through their contents in a less cramped and dark part of the temple precincts. It was fortunate that the large antechapel, as restored by him, included a small room on either side provided with a door and paper-covered windows. So here a convenient 'reading-room' was close at hand for the old library, so strangely preserved, where Chiang and I were screened from any inquisitive eyes, even if an occasional worshipper came to 'kotow', ring a bell, and light his stick of incense before the big and ungainly statue of Buddha.

Discovery of walled-up chapel.

Before proceeding to give an account of the surprising 'finds' which that first rapid examination of 'specimen' bundles from the great deposit yielded, it will be convenient to record here some details about the hiding-place to which they owed their preservation, and also to state what indications could be gathered from it as to the origin and date of the deposit. From what Wang Tao-shih had told us it appeared that, when he first settled at Ch'ien-fo-tung some eight years before, he found the approach to this cave-temple almost completely covered with drift-sand. Judging from the condition of other caves close by and the relatively low level of this particular shrine, it is probable that the drift-sand which had accumulated behind the fallen rock débris of the antechapel area rose to 9 or 10 feet at the mouth of the entrance to the cella. As only a few labourers could be kept at work from the proceeds of pious donations coming at first driblet-like with lamentable slowness, it had taken two years or more to lay bare the whole of the wide passage, over 24 feet deep, and then to clear out the heavy masses of sand which had found their way into the cella. When this task had been accomplished, and while work was proceeding on the new statues which the Tao-shih was eager to set up, the labourers noticed a small crack in the frescoed passage wall to the right of the entrance. There appeared to be a brick wall behind the plastered surface instead of the solid conglomerate from which the cella and passage are hewn, and on breaking through this the small room, or side chapel, with its hidden deposit was discovered.

Inscription of A.D. 851 found in chapel.

When the chapel was being searched—for valuables, no doubt, in the first place—there was found a fine slab of black marble, about 3 feet wide, set into the west wall of the room and bearing a long and neatly engraved Chinese inscription. The Tao-shih had it subsequently removed and

placed in a more accessible position on the left-hand, or southern, wall of the passage. To the interesting contents of this inscription, of which M. Chavannes was kind enough to furnish an annotated translation,[1] I shall have occasion to refer further on. Through Chiang Ssŭ-yeh's reading I was made aware at the time that this inscribed stone was dated in the year corresponding to A. D. 851. Thus the important fact became clear to me from the first that the deposit of the manuscripts must have taken place some time after the middle of the ninth century.

Wall-paintings of passage.

Except for any dated records that might be found among the contents of the deposit itself, there was no other indication of a lower limit to the date than the style of the frescoes which covered the walls of the passage. According to the Tao-shih's explicit statement, which the actual condition of the surface of the wall around the opening into the side chapel bore out, mural painting of the same type had also covered the plaster facing the brickwork which closed the opening. The frescoes represented over life-size Bodhisattvas marching in procession with offerings (Fig. 200). They were very well painted, and fortunately the Tao-shih's restoring zeal had not interfered with them. Their style was met with again in a number of caves, as shown by the passage walls of Ch. VII and Ch. IX (Figs. 214, 225), the mural decoration of which had not suffered from any recent restoration. It seemed to me difficult to believe that these frescoes could be later than the period of the Sung dynasty. But obviously at a site where so much of old art work survived to inspire and guide successive generations of local artists, and where restoring activity can be proved to have continued intermittently for centuries, from T'ang to Mongol times, no absolute reliance could be placed on indications of style only.

Difficulties of searching hoard of manuscripts.

Thus archaeological evidence from the first gave encouraging hope that this big hoard would prove to contain manuscripts of importance and interest beyond the range of Chinese translations of Buddhist canonical literature; for during the period which is indicated by the extreme limits mentioned above, and for some time before it, this westernmost portion of Kan-su had been the meeting-place of varied races and contending political powers, and among all of them we know Buddhism to have been widely spread. All the more I felt the misgivings which the very hugeness of the deposit was bound to inspire as to the possibility of a thorough methodical search. The limitations of my philological knowledge would not permit of rapid selection of what might be of special interest amidst these masses of Chinese texts, and without adequate time it would be difficult even to pick out any non-Chinese materials that might be hidden away among them. But foremost of all was the apprehension that the timorous shifty priest, swayed by his worldly fears and spiritual scruples, would be moved in a sudden fit of alarm or distrust to close down his shell before I had been able to extract any of the pearls. Eager as I felt to push on with all possible energy and speed, there were obvious reasons on the other side to display studied *insouciance* and to avoid whatever might cause the Tao-shih to attach exaggerated value to his treasures.

Chinese manuscript rolls first examined.

The interest and fascination of these novel labours of excavation may justify my presenting first a quasi-personal record of the discoveries, and of the impressions which accompanied them. A general survey of the different classes of manuscripts and other antiquities brought to light will be attempted in subsequent chapters. It was in keeping with the prevalent character of the old monastic library which had found here a safe place of refuge that the first bundles which the Tao-shih brought us from it consisted of thick rolls of paper, from about $9\frac{1}{2}$ to $10\frac{1}{2}$ inches in height, evidently containing Chinese translations of canonical Buddhist texts or Chinese treatises on them. Most of them were in very good preservation, and yet showed in paper and details of arrangement unmistakable signs of great age. The jointed strips of smooth yellowish paper, very close in texture and hence remarkably strong and tough, were usually found, as the specimens reproduced in

[1] See below, Appendix *A*, III.

Plates CLXVI–CLXVIII show, neatly rolled up, after the fashion of papyri, over small sticks of wood that sometimes had carved or inlaid end knobs. The length of the strips or sheets of which the rolls were made up varied from about 15 to 20 inches;[2] the rolls themselves when complete were found to extend to considerable lengths. All showed signs of having been much read and handled. Probably in consequence of this the protecting outer fold, with the silk tape which had served for tying up the roll, had got torn off very often.[3]

No attempt at cataloguing possible.

Where the covering folds of the rolls were intact it was easy for Chiang Ssŭ-yeh to read off the title of the Sūtra, the number of book and chapter, and anything else usually shown there. The information contained in those titles was of no guidance to me. The fact, however, that the headings of the rolls found in the first bundles were all different disposed of my apprehension that this great mass of manuscripts might be found to contain mainly an inane repetition of a few identical texts, after the fashion so widespread in modern Buddhism. At first I caused Chiang to prepare a rough list of titles; but as the Tao-shih gradually took more courage and brought out load after load of manuscript bundles for examination, all attempt even at the roughest cataloguing had to be abandoned.

Tibetan texts in roll form.

In this rapid examination of the first bundles Chiang failed to discover any colophons giving exact dates of the writing. The Tibetan texts, of which some also emerged from these bundles, could not be expected to help me in approximately determining the *terminus a quo* for the formation of the monastic library which was manifestly hidden away in the walled-up chapel. Those found then were also written in roll form (see specimens Ch. 05, 011, Plate CLXXIII; Ch. 06, 07, Plate CLXXIV), though with clearly marked sections, as convenience of reading required in the case of a writing that ran in horizontal lines. Neither the writing nor the probable contents, evidently portions of the canonical collections, could furnish chronological clues. But the paper, coarse and of a greyish tint, looked decidedly later than that of the Chinese Sūtra rolls. There was a presumption for connecting these Tibetan texts with the period of Tibetan predominance at Tun-huang, which lasted from about A.D. 759 to A.D. 850. Hence the conclusion suggested itself that the Chinese rolls, with their superior and manifestly older paper, would prove to belong to the preceding times of T'ang rule.

Discovery of texts in Cursive Gupta script.

But the first distinct assurance as regards the early origin of portions of the collection here deposited came when, on the reverse of a Chinese roll on old yellowish paper (now marked Ch. i. 0019, see App. *F*), incomplete but over 3 feet long, I lighted upon a text written in that Cursive Gupta script with which manuscript remains from Khotan sites and in the old language of Khotan had rendered me familiar. Soon there emerged three more fragmentary rolls of a similar kind (Ch. i. 0021. a, b, c; App. *F*), covered on one side or both with writing in the same script. The evidence seemed clear that at the time when the collection was formed a knowledge of Indian writing, and probably of Sanskrit, too, still prevailed in the Buddhism of this region. The appearance of Khotanese texts on the reverse of Chinese rolls distinctly pointed to a connexion existing at the time between the local religious establishments and the places where Buddhism had flourished in the Tārīm Basin. Nor had I long to wait before another bundle yielded a mass of Pōthī leaves, written in Cursive Gupta script and belonging, as Dr. Hoernle's analysis has since proved, to two

[2] For the indication furnished by these strips as to the size of sheets customary in early Chinese paper manufacture, see above, pp. 671 sq.

[3] In the specimen Ch. cv. 001 (Pl. CLXVII) this silk tape is visible, but placed within the roll instead of outside it, as the roll has been rolled up the reverse way in order to show the colophon and seal at its end. The uniformly observed arrangement is for the text to begin at the right end of the roll and the latter accordingly to be drawn out to the right, the stick being placed against the left end of the paper roll.

different works in Khotanese language, one of them, Ch. ii. 003 (Plate CL), a medical text, being represented by not less than 71 leaves.

Convolutes of miscellaneous papers.

Mixed up with these disarranged leaves, Chinese and Tibetan rolls, and portions of large Tibetan Pōthīs, there were found convolutes of miscellaneous Chinese papers, written on detached sheets. The utter confusion prevailing in these bundles and their careless fastening, often without an outer cloth cover, clearly showed that no trouble had been taken to preserve the materials in whatever kind of arrangement they might have originally been found. But the very careless treatment to which the manuscripts had been exposed on that occasion, and probably also in subsequent searches for treasure, helped to bring out still more the remarkable state of preservation observed in individual pieces. However much disturbed in their order, the contents of the bundles showed no sign of having suffered in their material. Nowhere could I trace the slightest effect of moisture, and there was an equally striking absence of brittleness. The explanation was sufficiently obvious. No place could have been better adapted for preserving such relics than a chamber carved in the live rock of these absolutely barren hills and completely shut off from any moisture that the atmosphere of this desert valley ever contained. Enclosed by thick rock everywhere, except for the narrow walled-up entrance, and that, too, covered up by drift-sand for centuries, the air within the small chapel could have undergone but slight changes of temperature. Not in the driest soil could the relics of a ruined site have been so completely protected from injury as they had been here.

Perfect preservation in rock-carved chambers.

First discovery of painted banners.

The importance of the exceptionally favourable conditions of preservation enjoyed by this great deposit impressed itself upon me even more when, on opening a large packet wrapped in a sheet of stout discoloured canvas, I found in it, mixed up with miscellaneous papers, paintings on fine gauze-like silk and on linen, as well as a mass of textile pieces in all kinds of silk and brocade, suggesting ex-votos. Most of the paintings first found were narrow pieces from 2 to 3 feet in length, and could, by their triangular tops and floating streamers, be recognized at once as having been intended for temple banners. Their general arrangement is shown by the specimens in Plates LXXVII, LXXX–LXXXIX, and will be fully explained further on. The silk banners were usually found rolled up tightly over the small lacquered or painted 'strainers' of wood which had served to hold the streamers in position at the bottom. When unfurled, these silk banners showed painted figures of Buddhist divinities, retaining their harmonious colours in perfect freshness.[4] The silk used for them was invariably a transparent gauze of remarkable fineness. Any damage that their delicate material had in some cases suffered was the result, not of centuries of internment, but of long exposure in the shrines, as proved by the care with which rents had been repaired, etc.

Recovery of large silk paintings.

The risks attending the use of a very fine fabric were demonstrated only too clearly when subsequently I came upon convolutes containing silk paintings much larger in size. They must have been closely and often carelessly folded up at the time of their deposition, and were much creased and crumpled in consequence. After centuries of compression any attempt to open them out completely would have entailed obvious risks of damage to the thin material. But by lifting a fold here and there it was possible to see that the scenes represented were often as elaborate and crowded with figures as the fresco panels on the walls of some of the largest temple cellas. In Plates LVI–LXIV specimens of such large pictures on silk are reproduced after the delicate and difficult process of unfolding and cleaning had been successfully accomplished by expert hands at the British Museum. Plate LXXVI (Ch. 00350) illustrates one of the instances where such paintings were originally found in the state of mere crumpled-up packets of smoke-begrimed silk. The comparison shows, on the one hand, how great the risks of complete destruction had been for these

[4] See Pl. LXXVIII, LXXX for specimens of these first finds.

large silk hangings owing to their size and manner of storing, often after an evidently long use, and on the other, how much the conditions prevailing in this safe place of deposit had helped to preserve for us these fine relics of Buddhist pictorial art.

Selections for 'closer inspection'.

There was no time then to search for votive inscriptions likely to contain dates nor for any closer study of these paintings. My main care was how many of them I might be able to rescue from their dismal imprisonment and from the risks attending their present guardian's careless handling. It was with surprise and still more with a feeling of relief that I noted the little value which the Tao-shih seemed to attach to these relics. He raised no objection when I put aside rapidly 'for closer inspection' the best of the pictures on silk, linen, and paper I could lay my hands on in that first miscellaneous bundle. The temptation was great to claim there and then all its contents. But obviously it was not advisable to display too much *empressement* at this stage. So, restraining myself, I put the rest away, firmly resolved at the same time to return to the charge when the ground was prepared for more extensive acquisitions.

Wang Tao-shih's low estimation of art relics.

This diplomatic restraint had its immediate reward. It seemed to confirm the priest in his low estimation of all such art relics. So, hoping to divert by their sacrifice my attention from the precious rolls of Chinese Sūtra texts, to which he seemed to attach most value, he subsequently proceeded more assiduously to grope for and hand out bundles of what he evidently classed under the head of miscellaneous rubbish. The result was distinctly encouraging; for among the quantities of fragmentary Chinese texts which formed their prevailing contents papers of clearly secular character could be picked out in increasing numbers, besides drawings and block prints on paper, as well as more paintings on silk and plentiful leaves in Indian script of Cursive Gupta type. So Chiang Ssŭ-yeh and myself worked on without a break that first day, until darkness in the cave put a stop to further efforts.

Highly gratifying as the variety and interest of these unhoped-for discoveries was, my foremost attention was claimed by a task that was all-important for the time being. It was to keep Wang Tao-shih in a pliable mood and to prevent him from giving way to the nervous flutterings with which the chance of any intrusion and of consequent hostile rumours among his patrons intermittently filled him. Chiang Ssŭ-yeh's genial persuasion and any reassuring display that I could make of my devotion to Buddhist lore and Hsüan-tsang's memory proved helpful for this end. At times the priest's apprehensive and suspicious look would yield to one of placid contentment or even pride at our appreciation of much that was to him valueless lore, even though he grew visibly tired of climbing over manuscript heaps and dragging out heavy bundles. I had taken care in advance to assure him of a generous donation for his shrine in compensation for the trouble and possible risk he was facing over my examination of his treasures.

Talks with Wang Tao-shih.

Late in the evening a big selection of manuscripts and painted fabrics properly packed lay ready on one side of our 'reading-room', awaiting removal for what our diplomatic convention styled 'closer examination'. But there remained the great question whether the Tao-shih would be willing to face the risks of this removal, and subsequently to fall in with the true interpretation of our purpose. It did not seem prudent as yet to approach him with ignoble words about sale and purchase, or to attempt removal except in strictest secrecy. But as we were leaving his shrine, tired with the day's work, I took occasion to engage the priest in another long talk about our common patron saint. I claimed it as an obvious proof of the Arhat's guidance and favour that I should have been privileged to behold such a great hidden store of sacred texts and other relics of piety, in part connected, perhaps, with his Indian pilgrimage, within a cave-temple which so devoted an admirer of 'T'ang-sêng' had restored to its full splendour. As we stood in the loggia, which the Tao-shih had adorned with the frescoes of his saintly hero's adventures, I emphatically

called his attention to the panel which showed Hsüan-tsang returning from India as he leads his horse heavily laden with sacred manuscripts. It was the most effective parable in support of my plea to be allowed to render accessible to Western students as much as possible of the relics which Wang Tao-shih had discovered, and yet was keeping from daylight.

Chiang Ssŭ-yeh remained behind and used all the force of his persuasive reasoning to urge upon the priest that continued confinement in a dark hole was not the purpose for which T'ang-sêng had allowed him to light upon these remains of Buddhist doctrine and worship. Since he himself was quite incompetent to do justice to them by study, it would be an act of real religious merit to allow Buddhist scholars in India and the West to benefit by them. That this pious concession would also be rewarded by an ample donation for the benefit of the shrine was an argument which lost none of its force from being advanced with discretion—and supported by a preceding unconditioned gift of silver. It was impossible to feel sure what impression all such talks produced on the mind of the Tao-shih. He seemed constantly to vacillate between fears about his saintly reputation and a shrewd grasp of the advantages to be attained for his cherished task by accommodating me with regard to useless old things.

Secret removal of 'selections'.

In any case it was for Chiang Ssŭ-yeh alone to tackle the question of the best way to secure quietly the manuscripts and paintings selected. As it proved, I had not trusted in vain his zeal and diplomatic ability. It was towards midnight, and I was about to retire to rest, when he came with cautious footsteps to make sure that nobody was stirring near my tent. A little later he returned with a big bundle, and my satisfaction was great when assured that it contained all my 'selections'. The Tao-shih in the end had summoned up courage to fall in with my wishes, but with the explicit stipulation that nobody besides us three was to learn what was being transacted, and that as long as I was on Chinese soil the origin of these 'finds' was to be kept entirely secret. He himself was afraid of being seen at night outside his temple quarters. So Chiang Ssŭ-yeh took it upon himself to be the sole carrier. For seven nights more he thus came to my tent, with loads which grew steadily heavier and in the end needed carriage by instalments. It was trying work for my slightly built scholar friend, and the cheerful devotion with which he performed it remains, like all his other zealous help, deeply impressed on my memory.

Section II.—FINDS IN A POLYGLOT LIBRARY

Continued exploration of deposit.

The hopes which that first day's successful work had raised were not disappointed by the results of my subsequent labours. Nor did the difficult conditions with which we had to contend in the exploration of the great hidden deposit undergo any essential change. But there is no need to describe in similar detail how the search was continued day after day without remission, and still less to record in quasi-chronological order all the interesting finds which rewarded this 'digging'. That the contents of the walled-up chapel were no longer in the order in which they had been deposited was clear. Any indications that the original position of the bundles might have afforded at the time of discovery had necessarily become effaced when the recess was cleared out in search of valuables and, later again, on the occasion of the removal of the big inscribed slab from its west wall. Even the assortment of the contents in each bundle was likely to have been often disturbed. Besides, it was mere chance in what order the Tao-shih would hand out the bundles.

History of hidden deposit.

There was no time during that hurried search to appreciate properly the antiquarian import of all that passed through my hands. Even in the case of the materials which I put aside as of special interest and secured, systematic study was bound to take years of expert labour. A review of what these researches have so far established as regards the main classes of relics must be left for

a subsequent chapter. But there were also discoveries which I could recognize at the time as throwing light on the history of the whole *cache* as well as on that of the site. As far as the conclusions drawn from them have received confirmation through expert examination in Europe, and through the results of Professor P. Pelliot's fruitful visit to Wang Tao-shih's 'treasure cave' a year later, I propose to discuss them here, along with the archaeological indications that could be gathered on the spot.

Value of 'miscellaneous' bundles.

That the great mass of more or less uniform packets containing rolls of Buddhist texts in Chinese or Tibetan[1] had belonged to monastic libraries was clear to me from the first. But equally certain it was that prolonged philological labours of competent experts would be needed before accurate data could be derived from them as regards the character and origin of the local collections of which they had formed part. From those packets it was easy to distinguish the 'miscellaneous' bundles, of quite irregular shape and fastening, the special value of which had already revealed itself to me through the first day's experience. There could be little doubt that the painted fabrics, ex-votos made of textile pieces, and papers of all kinds, which along with fragmentary rolls of Chinese and Tibetan manuscripts formed their usual contents, had been collected from shrines where they had once been deposited, and stored away here when no longer required for use. Their very irregularity had caused the Tao-shih to put most of such bundles on the top when he built up the wall-like array of what might be called 'library bundles'. There they could be reached with ease, and this proved a special inducement for him to bring them out in steady succession.

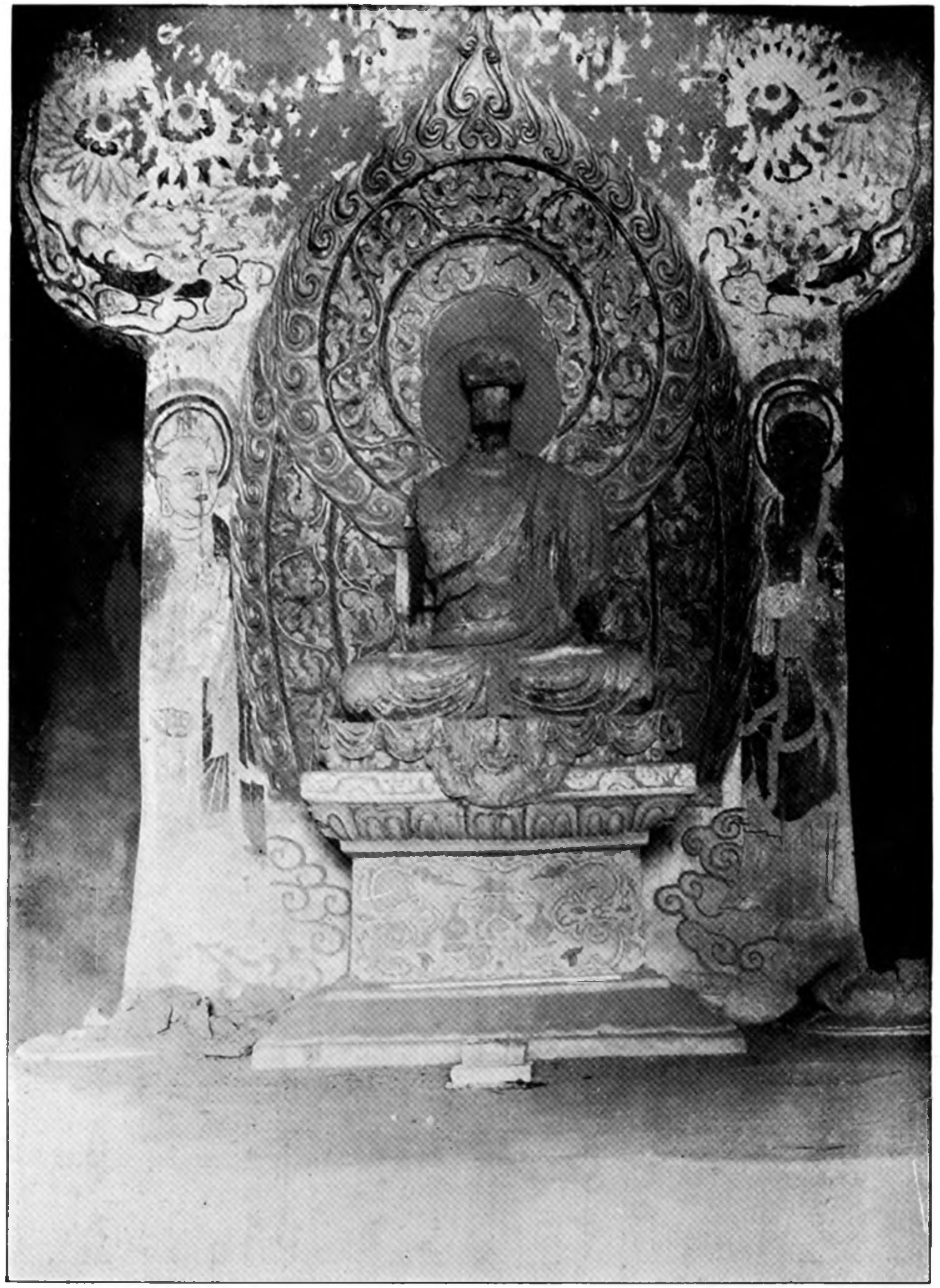
Manuscripts in Brāhmī writing.

It was from these 'mixed' bundles that I recovered most of the manuscripts with Brāhmī writing and of the Indian Pōthī shape, as well as a portion of the rolls which bear a Chinese text on the obverse and have their reverse wholly or partially covered with Brāhmī script.[2] The results of Dr. Hoernle's and Professor De la Vallée Poussin's painstaking examination of these texts will be reviewed in Chapter XXIV below, and a complete descriptive list of them will be found in Dr. Hoernle's Appendix *F*. It will be seen from the former that the languages represented in these Brāhmī texts are mainly Sanskrit and that 'unknown' tongue of Īrānian type for which the term 'Khotanese', now recommended by Professor Sten Konow and Dr. Hoernle, appears the most convenient provisional designation.[3] The other 'unknown' Indo-European language of Eastern Turkestān which appears to have been used chiefly in the north of the Tārīm Basin, and for which the term 'Kuchean', in view of the strong grounds advanced by Professor Sylvain Lévi, may now be safely accepted, is represented only by a few leaves. Among the Sanskrit texts, which almost all significantly enough are of the Pōthī shape and were contained in 'mixed' bundles, the remarkably well-preserved manuscript on palm leaves, 69 in all, of a redaction of the *Prajñā-pāramitā*, Ch. 0079. a (Plate CXLII), claimed my special interest at the outset. The material clearly showed that this manuscript must have been written in India, and, as the writing is recognized by

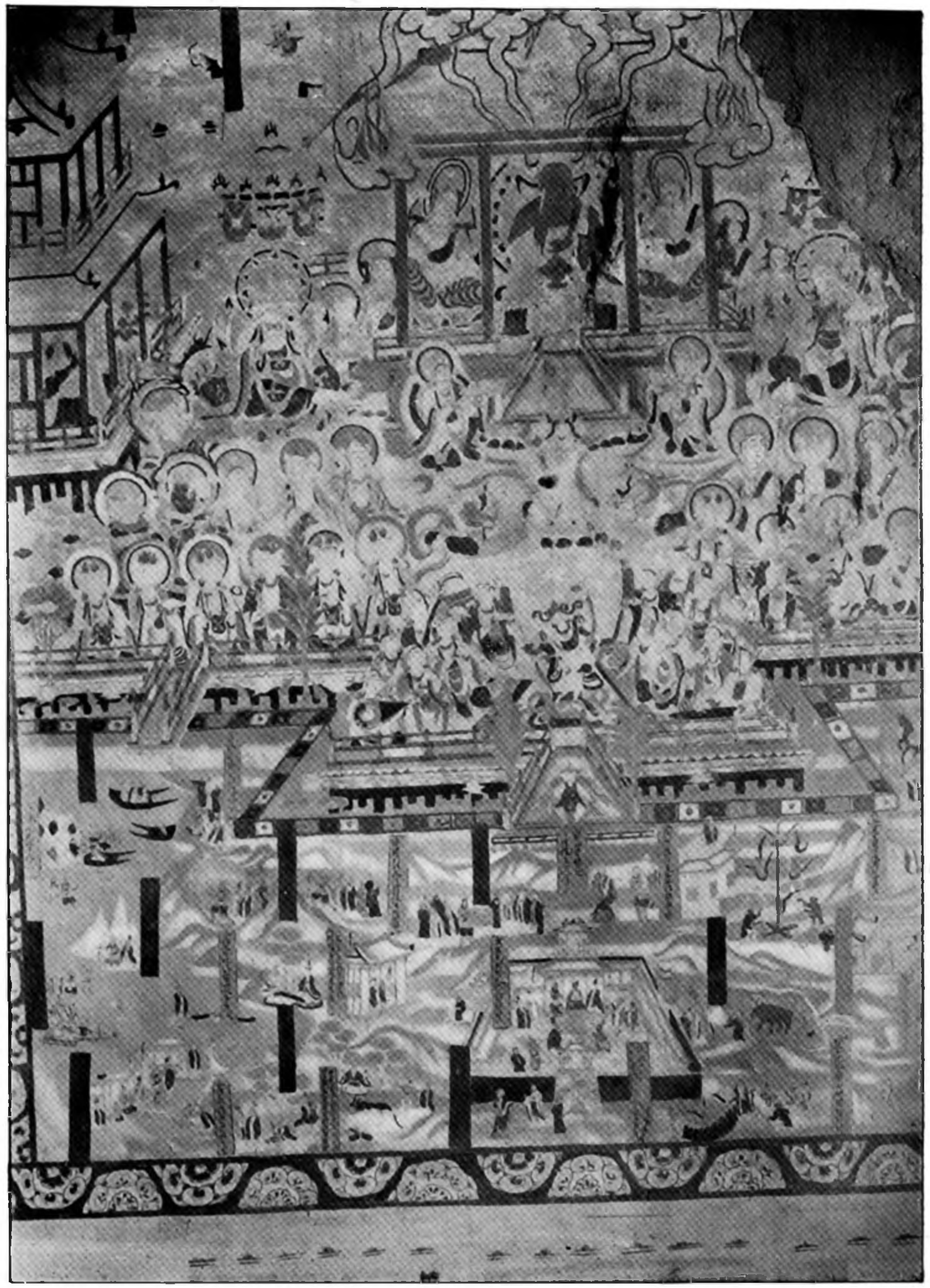
[1] For a photograph showing a pile of such bundles, mainly of Chinese Sūtra texts, in their original cloth wrappers, see *Desert Cathay*, ii. Fig. 194.

[2] In Dr. Hoernle's descriptive list of Brāhmī manuscripts from Ch'ien-fo-tung, Appendix *F*, the Pōthīs and rolls found in miscellaneous bundles can be generally distinguished from those which were extracted from regular packets of Chinese rolls by the bundle number in small Roman figures (i, ii, xl, etc.) prefixed to the serial numbers (003, 0019, etc.) in the 'site-marks'. Pōthī leaves and rolls subsequently recovered on searching the regular packets in which they were embedded bear only serial numbers (e. g. Ch. 0041, 00271, etc.). Only in a few cases, e.g. Ch. 0079. a, b; 00275, have Brāhmī texts been described without an indication of the 'mixed' bundles in which they had originally come to light. I may note here that when the marking with serial numbers was made at the British Museum, no classification of the different objects (manuscripts, paintings, decorated fabrics, etc.) found in the same mixed bundle could be attempted.

[3] For the reasons supporting the use of this designation, first suggested by Prof. J. Kirste, see now Hoernle, *Manuscript Remains found in E. Turkestan*, i. pp. x sqq.

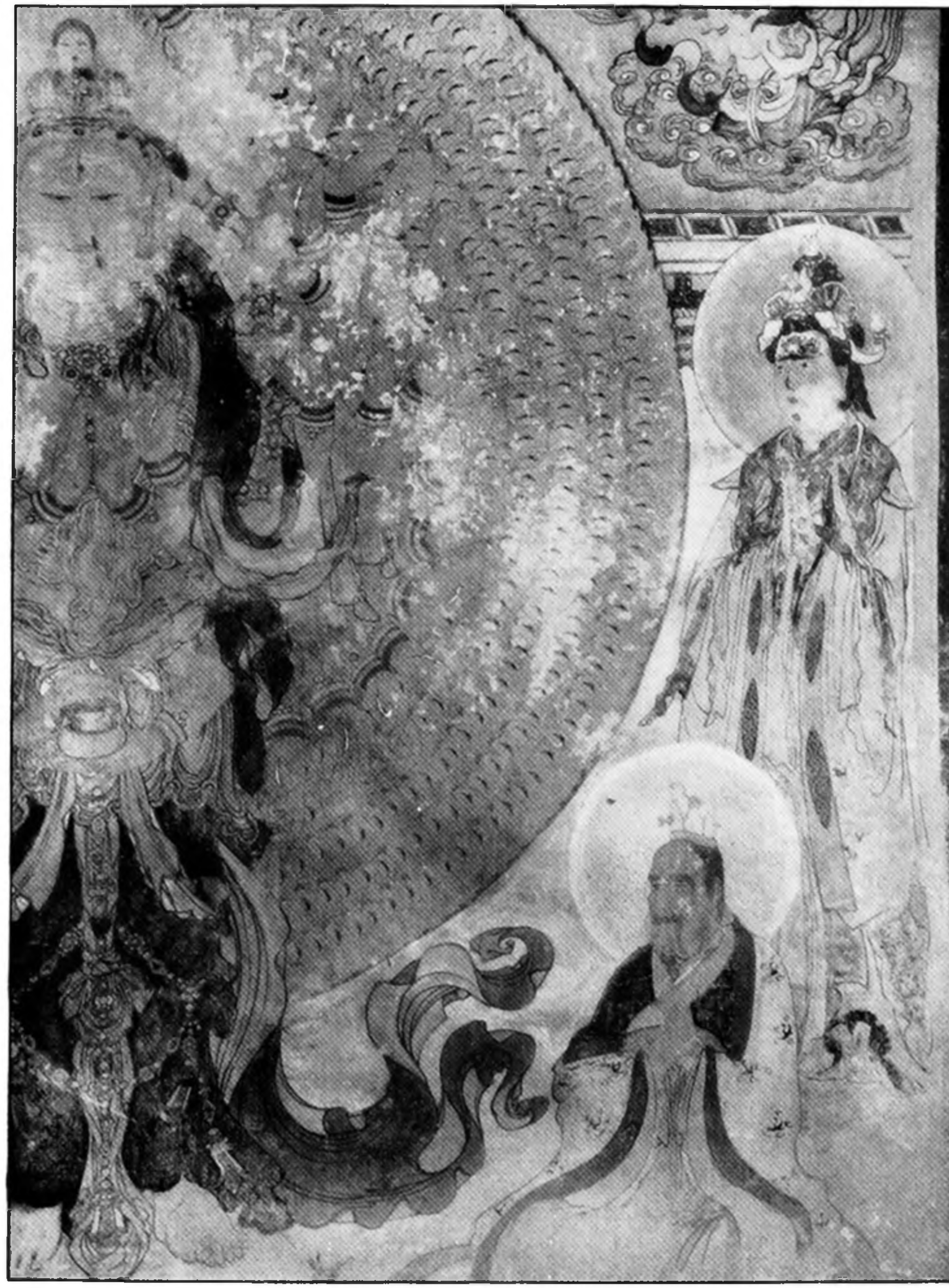


201. STUCCO IMAGE OF COLOSSAL SEATED BUDDHA, WITH PAINTED HALO AND VESICA IN RELIEVO AND TEMPERA PAINTINGS ON ROCK-CARVED SCREEN BEHIND, IN CELLA OF CAVE CH. II, CH'IEN-FO-TUNG.



202. PANEL PAINTED IN TEMPERA, SHOWING SUKHAVATĪ SCENE ABOVE AND JĀTAKA SCENE BELOW, ON SOUTH WALL OF CAVE CH. II, CH'IEN-FO-TUNG.

203. FRESCO PAINTINGS ON SOUTH WALL AND SOUTH-WEST CORNER PANEL OF CAVE CELLA, CH. II. A, CH'IEN-FO-TUNG.



204. PORTION OF FRESCO PAINTING ON SOUTH WALL OF CAVE CELLA, CH. II. A, CH'IEN-FO-TUNG.

Dr. Hoernle as an upright Gupta of the Nepalese type, it appears highly probable that it was imported directly from the south, i.e. through Tibet. The fact that the palaeographic features point to the eighth or ninth century A. D. fully agrees with this assumption, as that was exactly the period of Tibetan predominance at Tun-huang.

In the case of the other Sanskrit manuscripts (see e.g. Ch. vii. 001. a, Plate CXLIII) the writing in Slanting Gupta places their Central-Asian origin beyond all doubt, and at the same time renders it very probable that they were brought to this site from Eastern Turkestān and not copied locally. This conclusion seems justified in view of the fact that, wherever Brāhmī writing is found on the reverse of Chinese rolls, it is invariably of the Cursive Gupta type, whatever the language, as a reference to the inventory in Appendix *F* will prove. That these rolls originally belonged to the old Chinese stock of the local monastic libraries is made obvious at first sight by their paper and general appearance, including the careful penmanship of the obverse. It is equally clear that it was merely the convenient writing-material offered by their blank reverse which led to this being utilized at a later period for Brāhmī texts.[4] As will be noted further on, I saw at the time that a number of these contained alphabetic tables and writing exercises. The observation is of interest, as it serves to prove conclusively the presence among the local monks, at least in that later period, of men familiar with Khotanese as well as with Sanskrit of a sort.

Brāhmī texts on reverse of Chinese rolls.

Brāhmī alphabet tables.

Both the Upright and the Cursive types of Central-Asian Brāhmī writing are found in the Pōthīs containing 'Khotanese' texts, of which the complete version of the *Vajracchedikā*, Ch. 00275 + Ch. xlvi. 0012. a (Plate CXLIX), in 44 folios, and the large manuscript of a medical formulary, Ch. ii. 003 (Plate CL) in 71 leaves, may be quoted as typical specimens. As both types of Brāhmī writing are met with in manuscript remains from sites of the Khotan region which contain texts of this language, the question whether these Pōthīs were brought thence to Tun-huang or written locally cannot be settled on that ground. Nor is it possible to make quite sure of the origin of the huge roll, Ch. c. 001 (Plate CXLVI), over 70 feet long and nearly a foot wide, which by its size and excellent state of preservation—in its 1,108 lines it is practically complete—was outwardly the most striking among the non-Chinese manuscript finds.[5] The contents have proved to consist of Buddhist texts in corrupt Sanskrit interspersed with 'Khotanese' statements, the former in Upright, the latter in Cursive Gupta. But both its shape and its paper, of a kind plentifully found among the later Chinese documents and texts of the walled-up deposit, raise a presumption that this monumental roll was produced by some pious local scribe. The presumption is supported also by the design of the painted silk cover, which agrees in style with motifs frequently shown by the paintings and decorated textiles from the same hoard.

Pōthīs and Khotanese texts.

At the time I was able to appreciate best the philological interest of these Brāhmī texts. But, apart from this, they have an archaeological value as offering tangible proof that the monastic communities established at Tun-huang, among a population mainly Chinese, must have retained, until a relatively late period, direct touch with those in the Tārīm Basin and particularly in the Khotan region. Considering that ever since Tang times the main line of communication connecting China with the Western regions led, not westwards through Tun-huang to Lop and Khotan, but through Hāmi towards the oases along the T'ien-shan range, it seems difficult not to recognize evidence of some special links between Tun-huang and Khotan Buddhism in the prevalence of Khotanese texts among the Brāhmī manuscript remains of the walled-up chapel. There

Links between Tun-huang and Khotan Buddhism.

[4] Pl. CXLV shows such a roll, Ch. lviii. 007, with the end of the Chinese Buddhist text on the obverse, and portions of the syllabaries written in Cursive Gupta on the reverse; cf. for the latter Dr. Hoernle's description, *J.R.A.S.*, 1911, pp. 452 sqq.

[5] Pl. CXLVI shows one unfolded portion of this roll reproduced topsy-turvy, a mistake which owing to my absence in India at the time remained uncorrected.

are indications of such links, as we shall see further on, to be traced also in other remains of the 'Thousand Buddhas'.

Tibetan manuscripts.

But however this may be, there is definite proof in the abundance of Tibetan texts that the Buddhism of Tun-huang must have been subject to an even more powerful influence from the south during a certain period, and fortunately we can determine this from well-established historical facts. The 'miscellaneous bundles' had from the first proved to contain hundreds of leaves from Tibetan Pōthīs. The packets of leaves were usually mixed up in great confusion; but the greatly varying sizes, as illustrated by the specimens reproduced in Plates CLXXIII–CLXXIV, would help to restore order afterwards. Apart from these books of loose leaves, provided often with string holes but with no strings to hold them together, and from occasional rolls with Tibetan text written crosswise (see Ch. 06, 07, Plate CLXXIV), I soon ascertained that the solid mass of 'library bundles' still left in the chapel contained also a considerable proportion of packets with large convolutes of Tibetan sheets usually divided into six columns (Ch. 05, Plate CLXXIII).

Not being a Tibetan scholar, I had no means to make sure whether these convolutes contained different portions from the huge canon of Tibetan Buddhist literature or mainly such endless repetitions of favourite religious texts as Tibetan piety still loves to produce in print—or to use on prayer-wheels. But it was easy to notice that the coarse whitish paper of these sheets differed greatly from that of both rolls and Pōthīs. The rolls seemed for the most part to be written on thin grey paper of inferior texture, such as had been used also for Chinese rolls of what soon proved to be a later period, or else on the back of Chinese rolls of that thin but tough yellowish paper of superior make which dated colophons before long taught me to associate with T'ang times. That both classes of rolls had been written by Tibetan monks established at Tun-huang was an inference which readily offered itself. The paper of the Pōthīs was generally of a stronger make, altogether different in appearance, and recalling the Pōthī fragments which I had excavated at the Endere and Mīrān sites.[6] In the case of these Pōthīs, import from Tibet naturally suggested itself.

Tun-huang under Tibetan dominion.

But whatever the original place of production of these Tibetan manuscripts might have been, there could be no doubt about the reason for the great number of them in the walled-up library nor about the chronological indication that it affords. From the lucid analysis of Chinese historical notices which M. Chavannes had prefixed to his interpretation of the previously mentioned inscriptions of Ch'ien-fo-tung,[7] it was certain that Tun-huang had experienced prolonged periods of Tibetan predominance from the eighth to the tenth century. About A.D. 759 the territory of Tun-huang had been conquered by the Tibetans, who by A.D. 766 definitely established their power over the whole of Kan-su. The possession of Tun-huang was of special importance for the Tibetans, as it secured the gate for their final conquest of Eastern Turkestān towards the close of the eighth century,[8] but the administration of the territory was left in the hands of hereditary local chiefs or governors. It was one of these, Chang I-ch'ao, pre-eminently mentioned in the inscription of A.D. 894, who in A.D. 850 broke with the Tibetan power and made his submission to the Chinese empire.

Return of Tun-huang to Chinese allegiance, A.D. 850.

It is of this important event in the history of Tun-huang that a fortunate chance has preserved for us an authentic and almost contemporary record in the large Chinese inscription which, as already noted, was recovered from the hidden chapel, and of which M. Chavannes' generous help has provided an annotated translation in Appendix *A*. It has proved to reproduce two imperial edicts of A.D. 851, and their contents have so direct a bearing upon the conditions of Buddhism at Tun-huang during the Tibetan period that this seems the most appropriate place for briefly reviewing

[6] Cf. above, pp. 462 sq.; *Ancient Khotan*, i. pp. 425 sqq.

[7] See Chavannes, *Dix inscriptions*, pp. 12 sqq.

[8] Cf. M. Chavannes' discussion of the Chinese historical records, *Ancient Khotan*, i. pp. 534 sqq.

them. The first of the edicts, bearing an exact date corresponding to June 23, A.D. 851, records the grant of honorific ecclesiastical titles to Hung-jên, described as 'exercising the functions of chief of the Buddhist religion at Sha-chou', and to Wu-chan, another Buddhist Śramaṇa of Sha-chou, in recognition of the services they had rendered by bringing about the return of their territory to the imperial allegiance. The second edict, addressed to Hung-jên himself, conveys the emperor's eulogies for the loyal sentiments expressed through his envoy Wu-chan, encourages them to continue their efforts for the throne and the doctrine, and enumerates the various dignities and presents with which the emperor has honoured them both. The reference made to an edict addressed to Chang I-ch'ao,[9] as M. Chavannes has duly pointed out, is a clear indication that the mission organized by the two ecclesiastics was directly connected with the submission of that local ruler.

Influence of Chinese monks of Tun-huang among Tibetans.

M. Chavannes has not failed to draw special attention to the interesting sidelights thrown by the inscription on the important position which the Buddhist monks of Chinese origin settled in Tun-huang then held, and also on the extent of the influence which they evidently exercised among the Tibetans. The exceptional distinctions bestowed by the emperor upon the monastic head and the monk who had acted as his emissary to the court of China amply demonstrate the value which was attached to their diplomatic activity and to the links which they maintained between the Empire and the Chinese population of its long-lost outpost on the western marches. But it is still more interesting for us here to note the particular stress with which the imperial edict eulogizes the beneficent action exercised by the monks through their Buddhist doctrine upon the spirit of the Tibetan population. Their lot from birth having fallen among the barbarians, 'they have made their sentiments pass to Buddhism and have been able, through the sovereign doctrine . . . , to change the hearts of these men of strange race; their irascible and violent spirit has been entirely suppressed; loyal feelings and uprightness have been raised'. In the edict addressed to Hung-jên the monks are expressly enjoined to persevere in their civilizing exertions. The political objects aimed at by the imperial government stand out clearly enough. But equally clear it is that what prompted both its praise and appeal was a knowledge of the close relations established in this region between the Chinese monastic communities and their Tibetan confrères.

Tun-huang once more separated from Empire.

Chang I-ch'ao's submission to the emperor allowed the Chinese to re-establish a sort of suzerainty over the local ruling family on these westernmost marches.[10] The Ch'ien-fo-tung inscription of A.D. 894 shows that this still continued at that time. But during the troubled period which followed the downfall of the T'ang dynasty in the first years of the tenth century the Chinese again lost their hold upon Tun-huang and the territories adjoining it on the east. M. Chavannes has aptly called attention to the interesting evidence recorded for this by Kao Chü-hui, a member of the Chinese mission which in the years 938–42 proceeded from the imperial court to Khotan and returned.[11] Near Liang-chou he found established the Tang-hsiang 党項, a tribe which a century later was destined to raise the important kingdom of the Hsi-hsia 西夏, or Tanguts. Following the great route further west along the foot of the Nan-shan he came upon a chiefship of the Uigurs at Kan-chou. Then beyond Su-chou he passed through what was then the position of the 'Jade Gate barrier' and skirted Tibetan territory. On reaching Kua-chou 瓜州, the present An-hsi district, and Sha-chou, or Tun-huang, he found there an essentially Chinese population and the administration in the hands of a chief belonging to the local family of the Ts'ao. But his

[9] One is tempted to hazard the conjecture that the edict which is engraved first on the stēlē may be meant here. But M. Chavannes' description of the allusion as obscure enjoins caution.

[10] Cf. Chavannes, *Dix inscriptions*, p. 12.

[11] For extracts from Kao Chü-hui's important report, cf. Rémusat, *Ville de Khotan*, pp. 75 sqq.; also *Ancient Khotan*, i. p. 178, and above, p. 320.

narrative allows us to see that the territory, separated from China by the Tibetans, Uigurs, and Tang-hsiang, had once more passed under Tibetan dependence.

Tibetan hold upon Tun-huang.

As long as the Tibetans played the part of a great power in Asia during the eighth and ninth century, dominating vast regions to the east, west, and north beyond Tibet proper, Tun-huang must, owing to its geographical position, have possessed exceptional importance for them. It was in this tract that, then as now, the great high roads passing through the heart of Central Asia from east to west and from north to south crossed each other. By securing their hold on this cross-road of Tun-huang from the south the Tibetans had been able, about A.D. 766, to cut all communications between China and Eastern Turkestān, and finally, in A.D. 790, to overwhelm the Chinese garrisons holding out in the latter.[12] By the middle of the ninth century the expansive strength of Tibet had largely spent itself, and when Eastern Turkestān was abandoned to the rising power of the Uigurs, it was natural for the local rulers of Tun-huang to turn once more to China for support. The decaying power of the T'angs could, however, offer but little effective help beyond diplomatic encouragement such as the inscription of A.D. 851 indicates. Thus Tibetan influence in the Tun-huang region was bound to continue a good deal longer,[13] and in view of this political connexion, directly attested for two centuries or so, it was easy for me to understand why Tibetan Buddhism was so abundantly represented among the literary remains of the walled-up chapel and to some extent, as we shall see, among its artistic remains as well.

Uigur manuscripts.

The cessation of Tibetan political and military enterprise north-westward could not have materially affected the links which geographical position and successive periods of common subjection to the Chinese Empire had necessarily created between Tun-huang and the nearest territories of Eastern Turkestān. Buddhism is known to have flourished greatly throughout the powerful kingdom which the Turkish tribe of the Uigurs established after A.D. 860 on both sides of the Eastern T'ien-shan, and which during the tenth century extended south-eastwards, too, into outlying parts of Kan-su.[14] So it could cause no surprise to find evidence of that connexion also in the shape of remains of Uigur manuscripts which cropped up in some of the 'miscellaneous' bundles. Apart from texts written on the reverse of Chinese rolls, they comprised documents on loose leaves and a few texts written in the form of booklets (for specimens see Plates CLXIII–CLXV). Chinese glosses and marginalia found in the latter suggested that these were translations from Chinese Buddhist texts. Such Chinese entries occurred also in the Uigur text of two well-preserved volumes of small quarto size (Plates CLXIII, CLXIV) which were made up of sheets of thin paper folded and stitched after the fashion of Chinese printed books. I shall have occasion further on to comment specially upon the date and probable origin of these texts.[15]

Sogdian texts.

I had noticed from the first that in a number of rolls which I supposed to contain old Turkī texts in the Uigur script the writing, though obviously, too, a derivative of Syriac, was of a different type, distinctly less cursive and of a firmer shape. But it was only after my return to Europe that I realized the true character of the language of these texts. It is Sogdian, the old Īrānian tongue of the territories north of the Middle Oxus, the survival of which in early translations of Buddhist literature had first been revealed by Professor F. W. K. Müller's researches on manuscript finds from Turfān. Great as the advance in its study has been since, mainly through the lamented late M. Gauthiot's brilliant labours, the time has not yet arrived for determining the exact chronological

[12] Cf. M. Chavannes' remarks, *Ancient Khotan*, i. p. 534, note 2; p. 535 sq.

[13] This is very clearly brought out by the reference made in the inscription of A.D. 894 to the influence and dignity enjoyed by a Buddhist monk of Tun-huang at the Tibetan court. See Chavannes, *Dix inscriptions*, p. 85, with note 4; also above, p. 799.

[14] Cf. Grenard, *Journal Asiat.*, jan.–févr. 1900, pp. 28 sq.

[15] See below, pp. 828 sq., 923.

limits of the use of these Sogdian texts in Buddhist communities of Eastern Turkestān, nor the extent of the territories into which this use had been carried. But the fact that some of these Sogdian texts from the Ch'ien-fo-tung hoard are written on the back of Chinese rolls which manifestly belong to T'ang times and were put to fresh use locally is instructive by itself. It proves that Buddhist monks of Īrānian origin must have penetrated to Tun-huang. This perfectly accords with what Professor Pelliot has been able to prove, partly from texts among the Chinese manuscripts I brought back from the 'Thousand Buddhas', about a Sogdian settlement under a chief from Samarkand having been established in the Lop tract from about the middle of the seventh century.[16]

Discovery of Manichaean manuscript roll.

It was from one of those 'mixed' bundles (Ch. xxxix) that there emerged on the third day of my search a remarkable manuscript, exhibiting a third variety of the Syriac script transplanted to Central Asia, and the one which discoveries at the ruined sites of Turfān first revealed as peculiar to Manichaean writings. It was an excellently preserved narrow roll of paper, close on 15 feet long (see Plate CLXII for specimen portion), containing the beautifully written and almost complete text of what Professor A. von Lecoq has since recognized as the Turkish version of the *Khuastuanift*, a Manichaean confession prayer.[17] The discovery amidst Chinese Buddhist texts and monastic records of this Manichaean relic was interesting, indeed, but could scarcely cause surprise; for the Turfān excavations and finds had previously shown us how easy it evidently was for Mani's church in Central Asia to share the same sacred site with Buddhist cult, and with Christian worship, too, though remaining for centuries a formidable rival to them both.

Manuscript book in 'Runic' Turkish.

We shall see further on that the presence of Turkish-speaking Manichaeans at Tun-huang is also attested by another important find from the walled-up chapel. I mean the perfectly preserved small book in Turkish 'Runic' script seen in Plate CLX.[18] But this did not come to light until the solid bundles of Chinese Sūtra rolls subsequently acquired from the hoard could be searched in London. During the time of my actual stay at the caves only some torn fragments of a text in Turkish Runic script, Ch. 0014 (Plate CLXI),[19] afforded proof that this earliest known form of Turkish writing had also been familiar to some of those who visited the sacred site before its great deposit of relics was hidden.

Section III.—ACQUISITION OF MANUSCRIPTS AND ART RELICS

Miscellaneous monastic records, etc.

However interesting such stray finds were as illustrations of the remarkable polyglot aspect which this place of Buddhist worship must have once presented, and whatever their philological value might prove hereafter, I could not expect them to offer much help towards settling the question, which archaeologically was of special importance, as to the date at which the chapel was walled up. I realized from the first that for this purpose the miscellaneous records in Chinese, such as monastic documents, letters, memoranda, and accounts, which filled those bundles in abundance, were bound to prove far more useful. Guided by Chiang Ssŭ-yeh's rapid examination of their contents and by peculiarities of their shape and paper (for specimens, see Ch. 365, 1283, Plate CLXVIII), I soon learned to distinguish them and to pick them out where they were embedded among packets of Chinese Buddhist texts. They were likely to throw instructive light, not only on

[16] Cf. Pelliot, *Journal Asiat.*, janv.–févr. 1916, pp. 120 sqq.; also above, pp. 653 sq.

[17] For an edition and annotated translation of this text, see Prof. von Lecoq's paper *Dr. Stein's Turkish Khuastuanift from Tun-huang*, *J.R.A.S.*, 1911, pp. 277–314.

[18] Cf. Professor V. Thomsen's paper, *J.R.A.S.*, 1912, pp. 190 sqq.; also below, p. 921.

[19] See for Prof. Thomsen's analysis of these fragments, *J.R.A.S.*, 1912, pp. 215 sqq.

details of monastic organization and worship prevailing here during the centuries which preceded the closing of the deposit, but also on various aspects of local conditions and private life.

Latest date records of Chinese manuscripts.

What, however, attracted my attention to them most was the chronological assurance that I could derive from them at the time. A considerable proportion of those which passed through my hands in the course of our eager search proved to be accurately dated. Before long the number of such records, many quasi-official, was large enough to allow a definite conclusion to be drawn as to the time limits within which the contents of this great *cache* were likely to have been brought together and finally walled up. The large majority belonged to the tenth century of our era, and, while those from its second and third quarter were frequent, none of the dated documents came down later than the second reign of the Sung dynasty, the last recorded *nien-hao* corresponding to A.D. 990–4. So I was led to assume that the walling-up of the chamber was likely to have taken place in the early years of the eleventh century. Here I may at once mention the fact that the examination of the pictures and woodcuts has fully confirmed this conclusion, the latest dates recorded on them being of the years 980 and 983.

Absence of Hsi-hsia script.

There was a negative fact, too, observed at the time which lent distinct support to this approximate dating. Among all the masses of manuscripts then and afterwards examined, not a single trace has been found of the peculiar script introduced by the founder of the Hsi-hsia, or Tangut, dynasty which, as we know, conquered Tun-huang between the years A.D. 1034 and 1037,[1] and ruled it for close on two centuries. Yet among the *sgraffiti* to be seen on the painted walls of the caves, apart from the hundreds in Chinese, I had noticed some in Hsi-hsia characters besides those in Tibetan, Mongol, and Uigur.

Deposit of sacred 'waste'.

The thought naturally suggested itself that it was some destructive invasion, such as that of the Tanguts might have been, which led to the walling-up of the little chapel and the subsequent complete oblivion of the *cache*. But there were indications also prompting the surmise that the small well-sheltered recess may have served previously as a place of deposit for all kinds of objects held of sacred use, but no longer needed in the various shrines and monastic quarters. Among such I may specially mention numerous small bags carefully packed and sewn up in cloth which contained nothing but tiny scraps of paper bearing Chinese characters, apparently fragments of religious texts. They had evidently been picked up and collected for the same superstitious reason which now causes Chinese people to rescue from floors and streets all bits of inscribed paper for ceremonial burning. In other and much larger bundles, such as e.g. Ch. xxxv, xxxvii, the contents consisted mainly of torn ends of Sūtra rolls stiffened with thin sticks of wood; of wooden rollers once used in manuscript rolls; silk tapes; cloth wrappers and similar library 'waste'. Elsewhere ex-voto rags of fabrics, small broken pieces of silk-paintings, painted wooden 'strainers' once belonging to banners, and the like were found tightly wrapped up in covers, along with block-printed pictures of sacred figures, silk streamers, etc.

Votive deposits collected in 'mixed' bundles.

It was impossible to doubt that these were relics of worship swept up from different shrines and put aside on account of religious scruples. It seemed very improbable that such insignificant remains could have been collected and sewn up systematically in the commotion of a sudden emergency. In view of the evidence thus provided and of the experience gained by the clearing of the ruined temple cellas of Dandān-oilik, Endere, Khādalik, and Mīrān, the question may well be considered whether the detached Pōthī leaves and other manuscript remains which were found in the 'mixed' bundles did not originally find their way there as votive deposits from image bases, etc., in different temples. But I need scarcely point out that the archaeological guarantee which

[1] Cf. Chavannes, *Dix inscriptions*, p. 14. The Hsi-hsia rule was brought to an end in A.D 1227 by the Mongol conquest.

a safe cover of sand would have provided at a ruin definitely abandoned to the desert was not to be looked for in a hoard first opened and searched by an ignorant and careless priest like Wang Tao-shih.

Archaeological indications from walled-up chapel.

It will be convenient to record here the scanty archaeological indications of the original character of this grotto which I gathered when it was completely cleared for a brief time. The exact measurements of its ground plan (Plate 43) were 9 feet from east to west and 8 feet 8 inches across. Opposite to the entrance and thus in front of the north wall there rose a plastered base, 5 feet long, 2 feet wide, to a height of 1 foot 8 inches. Its shape and position make it appear quite certain that it was intended as an image base. No remains of stucco sculptures or relievo haloes could be traced, and of mural painting there survived only decorative tracery work in faint colours on the upper portion of the north wall. Elsewhere the stuccoed surface of the wall was plain. Owing to the narrowness of the doorway, only 3 feet across, the light in the small chapel must at all times have been very poor. Hence it appears to me very unlikely that the large inscribed slab which reproduces the imperial edicts honouring Hung-jên could have been originally placed there. At the same time the fact that it was carefully set up in a recess carved from the rock of the west wall does not seem to me to point to hurried removal under the stress of a sudden danger. It appears more probable that during a period of advancing decay, such as the sacred site might have witnessed during the decennia preceding the Hsi-hsia conquest, pious monks wished to assure here a better chance of protection for the inscription which glorified the influence and imperial honours enjoyed by a former 'head of the Buddhist religion at Sha-chou'. Whether the transfer took place when the manuscripts and other contents of the hidden deposit were collected here, or some time before, it is no longer possible to determine.

Earliest dated record (A. D. 416).

From the first it was obvious to me that the objects deposited in this chapel might often have been of considerable antiquity at the time when the deposit was finally walled up. But not until a year later, when Chiang Ssŭ-yeh was engaged on preparing a rough inventory of at least a portion of the Chinese manuscripts brought away from Ch'ien-fo-tung and could find time for completely unfolding the Sūtra rolls, etc., in search of their colophons, did I receive the gratifying assurance that a considerable series among them showed exact dates which reach back as far as the beginning of the fifth century A. D. (see for specimens Plates CLXVI, CLXVIII). Thus, *inter alia*, the date corresponding to A.D. 416 of the interesting original record of a Tun-huang Census (Ch. 922, Plate CLXVI), which Dr. Giles has since published, was then correctly determined.[2] That it would need protracted scholarly labours in Europe before the date of the earliest piece among the collection secured could be definitely established was then already certain;[2a] and even now, after another nine years, it is impossible to foresee when they may be carried to completion.

Hasty search of 'mixed' bundles.

Not knowing how long we might rely on the Tao-shih's indulgence, all I could do during those first days at his cave was to work in great haste through the contents of the 'mixed' bundles. With the constant flow of fresh materials pouring down upon me, there was no chance of closer examination even in the case of art relics and of such manuscripts as were neither Chinese nor Tibetan and of which, consequently, I was able myself to estimate the full interest. All I could do was to assure their being put apart 'for further study', as we styled removal in diplomatic convention. More bitterly than ever did I regret the great hindrance created by my total want of Sinological training. Amidst the smothering mass of Buddhist canonical literature Chiang Ssŭ-yeh's zealous

[2] Cf. L. Giles, *A Census of Tun-huang*, *T'oung-pao*, 1915, pp. 468 sqq. I regret that Pl. CLXVI, through a mistake explained by my absence in India, shows the reverse of this interesting roll and only a small portion of its obverse. The text for which the blank paper of the reverse has been utilized is that of some later Buddhist manuscript.

[2a] [Dr. Giles has now found a Vinaya text with colophon dated A.D. 406.]

help, too, might not prevent Chinese texts of historical or literary interest from being left behind, even in the bundles that we were able to search.

'Convent of the Three Regions.'

Deprived of the knowledge which alone could guide among this tantalizing *embarras de richesses*, I had to rest content with a few encouraging glimpses. Thus it was first in a Chinese document dated A.D. 925 and bearing the seal of what evidently was the chief monastic establishment of the site that I lighted upon the old name of Ch'ien-fo-tung, which here figured as *San-chieh-ssŭ* 三界寺, the 'Convent of the Three Regions'. The local application of the name could not remain in doubt when we found again and again complete rolls of Buddhist texts stamped with the die of the 'Convent of the Three Regions' (see e.g. Ch. cv. 001, Plate CLXVII), and thus clearly marked as having formed part of the monastic library which had supplied the great mass of the manuscripts deposited in the chapel. The designation is no longer known, but the suggestion was made to me locally that there may be some connexion between it and the three divisions still distinguished among the cave-temples of Ch'ien-fo-tung and known as *Shang-ssŭ* 上寺, *Chung-ssŭ* 中寺, and *Hsia-ssŭ* 下寺. [For another and more likely interpretation, see *Add. & Corr.*]

Woodcuts and earliest printed text.

Then again there were to be found, folded up or otherwise hidden among rolls of Chinese texts, spirited drawings or woodcuts representing sacred figures or scenes (see Plates XCI–CI for specimens) and even fragments of illuminated texts, such as the fine booklet seen in Plate XC. Without any expert knowledge I could recognize their artistic value and the interest attaching to the exact dates, mostly of the latter half of the tenth century, which the several block-printed sheets, such as those seen in Plates CI, CII, exhibited. But still more interesting it was when I found that an excellently preserved roll (Ch. ciii. 0014, Plate C), with a well-designed block-printed frontispiece, had its text printed throughout, showing a date of production corresponding to A.D. 868. Here was conclusive proof that the art of printing books from wooden blocks was practised long before the Sung period to which the earliest previously known specimens belong, and also that in the ninth century the technical execution had already reached a level practically as high as the process permitted.

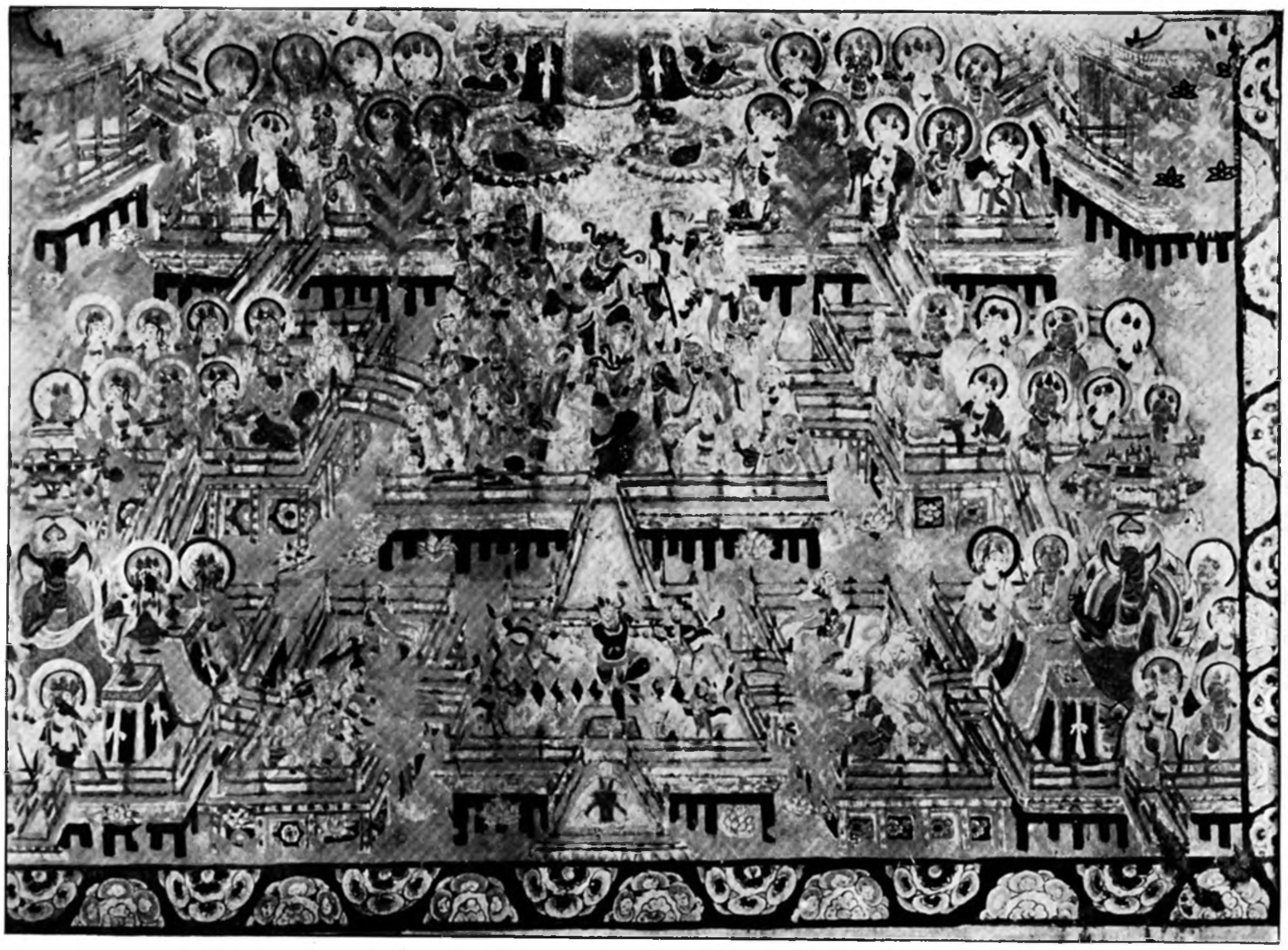
Extractions of 'miscellaneous' bundles.

It had cost five days of strenuous work to extract and rapidly search all 'miscellaneous' bundles likely to yield manuscripts of special interest, paintings, and other relics which I was eager to rescue first of all. It was fortunate that these bundles, being less convenient building material than the tightly wrapped uniform packets of Chinese and Tibetan rolls, had been put by Wang Tao-shih mostly on the top or in other more or less accessible positions, when he had last stuffed back his treasures into their original hiding-place. But there still remained, rising against the walls of the chapel, that solid rampart of manuscript bundles. I was naturally anxious to have these, too, cleared out in order to be able to search them rapidly, but felt scarcely surprised when this proved a troublesome undertaking in more than one sense. We had so far succeeded in overcoming the Tao-shih's relapses into timorous contrariness by discreet diplomacy and judiciously administered doses of silver. But now, when faced by the heavy labour of clearing out the whole chamber and by the increased risk of exposure thus involved, the priest became distinctly refractory.

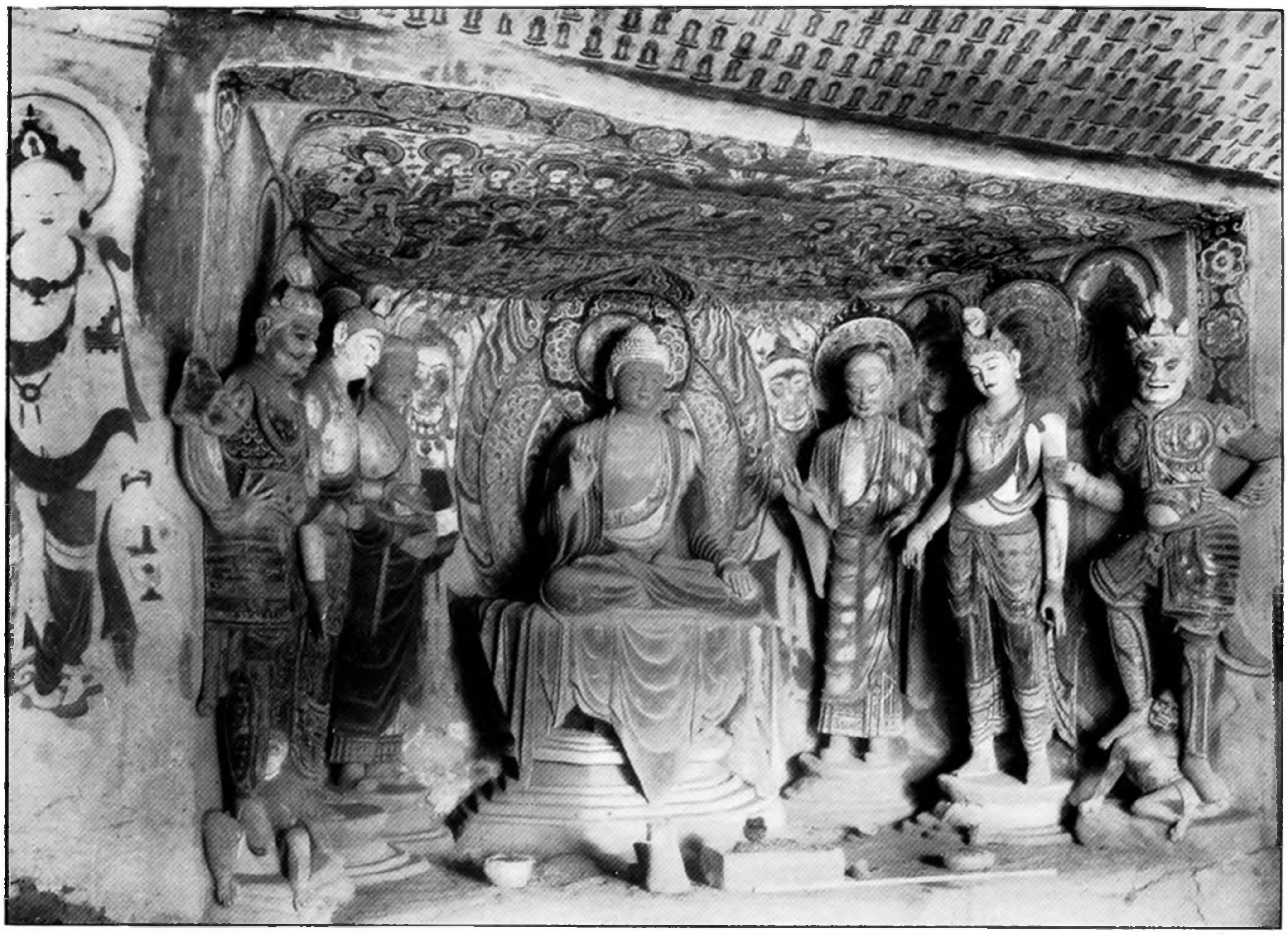
Clearing out 'library' bundles.

So prolonged efforts and fresh assurances were necessary before, under protest as it were, and after carefully locking the outer gate of the temple, he set to this great toil. Considering how little adapted his slender physique was for it, I felt glad that he now allowed himself to be helped by a priestly famulus whose discretion could be relied upon. By keeping them both steadily to the task in spite of renewed remonstrances, I succeeded in having by nightfall of May 28 the whole of the regular 'library bundles' taken out and transferred to neat rows, mainly in the spacious cella of the temple. Those containing Chinese rolls proved to number about 1,050 in all, each holding on a rough calculation an average of more than a dozen separate manuscripts. To these had to be

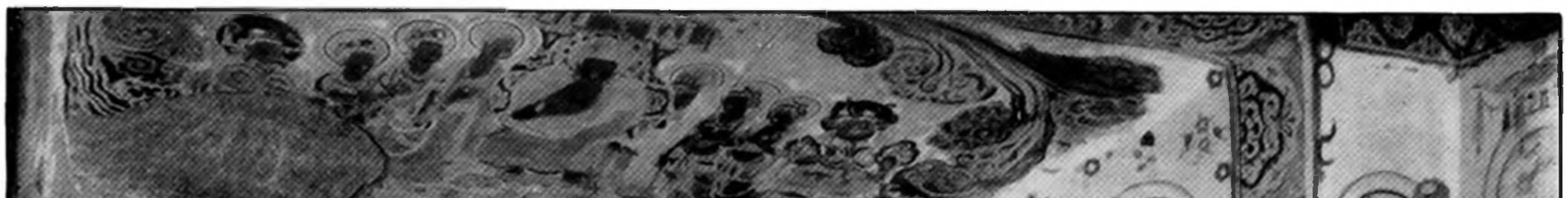
205. FRESCO PAINTING ON NORTH WALL OF CAVE CELLA, CH. II. A, CH'IEN-FO-TUNG.



206. PANEL PAINTED IN TEMPERA, SHOWING WESTERN PARADISE SCENE, ON SOUTH WALL OF CAVE CH. II, CH'IEN-FO-TUNG.



207. ALCOVE WITH STUCCO IMAGES, PARTLY RESTORED, IN CAVE CH. III. A, CH'IEN-FO-TUNG.



208. STUCCO IMAGES, PARTLY RESTORED, OF BUDDHA WITH ATTENDANT DISCIPLES AND BODHISATTVAS, IN CAVE IV, CH'IEN-FO-TUNG.

added over eighty packets of Tibetan rolls and convolutes, as well as eleven huge Tibetan Pōthīs, about 2 feet 5 inches long and 8 inches wide, with a height of nearly $1\frac{1}{2}$ feet, which appeared to be in fair order and to contain uniformly written portions of the Kanjur.

Bundles sewn up in canvas wrappers.

Almost all the bundles were sewn up tightly in coarse canvas covers, as seen in the case of the specimens which *Desert Cathay*, ii. Fig. 194, reproduces unopened. Whether these covers are old or were added after the discovery of the chapel I have not been able definitely to ascertain. Wang Tao-shih asserted the former. The ends of the covers were generally left open. Thus, as Wang handed out bundle after bundle through the chapel door, I was with Chiang's help just able to look hastily whether, embedded between the usual Chinese rolls, there were to be found any Pōthī leaves or other non-Chinese texts, folded-up small pictures, or other relics of obvious interest. Such we endeavoured to pick out as well as time would permit, and put them aside rapidly. But there was no time then even to glance at individual rolls and to see by unfolding them whether their reverses bore anywhere Indian or Central-Asian scripts or what else might be hidden within.

Art relics in 'mixed' bundles on floor.

In view of the Tao-shih's visibly growing reluctance, it did not appear safe at this stage to attempt any proper search which would necessarily have delayed the clearing. But perfunctory as the operation had to be, its timely completion brought a gratifying reward in the discovery at the very bottom of a number of large 'mixed' bundles (Ch. xlvi–lvii). They had been put by Wang Tao-shih to what he thought appropriate use in turning the floor at the foot of the north wall and on either side of the clay-built platform into a foundation level with the latter on which to build up his wall of manuscript bundles. They proved to contain a considerable number of exquisite silk paintings, several of exceptionally large size, and some beautiful textile pieces. Apart from the very instructive patchwork hangings (Ch. lv. 0028, Plates CVII, CVIII), it must suffice here to mention the magnificent embroidery picture, Plate CIV,[3] showing a Buddha between Bodhisattvas in life size. Owing to the heavy crushing which these bundles had been exposed to through their position low down on the ground, the recovery of the silk paintings contained in them required special care, and kept me busy during the greater part of the following day.

Negotiations with Wang Tao-shih.

At the same time lengthy negotiations ensued with the Tao-shih. Whether it was from the fear of increased risks of exposure or merely because he regretted having put, as it seemed, within our reach those precious Chinese Sūtra texts to which alone he seemed to attach particular value, he thought fit to press at this stage for an early end of our proceedings. While asking for a substantial subscription to his temple, he yet protested that any cession of sacred texts or 'Chings'—and among these he classed all Chinese manuscript rolls, whatever their contents might be—was impossible. Though this attitude was far from encouraging, I was glad that the Tao-shih came to business, as it were; for the preceding work had fully convinced me that it was my duty towards research to try my utmost to rescue the whole of this precious collection from the risk of slow dispersion and loss with which it was threatened in such keeping. But I also realized fully the serious difficulties and objections with which this course was beset. I was not qualified to form any definite estimate of the philological value of those masses of Chinese Buddhist texts which made up the bulk of the hidden library. Their contents were, no doubt, to be found in the complete editions of the Chinese *Tripiṭaka*, printed in Korea and Japan. Still less could I profitably attempt to select those texts which were likely to possess antiquarian or literary interest. The removal of whole cart-loads of manuscripts would inevitably lead to the whole transaction becoming public, and this was likely to compromise my chances of further work elsewhere. As regards Tun-huang itself, there was a special reason to avoid anything that might arouse religious resentment with its possibly serious consequences; for I knew through my Mandarin friends of the popular unrest, caused

Impossibility of complete removal.

[3] Cf. regarding this embroidery picture, below, pp. 895 sq.

locally by certain fiscal measures, which within a month after my departure actually found vent in a serious outbreak, and which it would have been obviously unwise to precipitate by any action on my part.

Attempt to secure whole hoard.

I decided, nevertheless, rather to face these risks than forgo the endeavour to rescue the whole hoard. Though Chiang Ssŭ-yeh did not conceal from me misgivings justified by his knowledge of local conditions, he loyally did his best to persuade the Tao-shih that removal of the collection to a 'temple of learning' in India, or in the land of those who held sway of the ancient home of Buddhism, would be an act which might well be approved as pious. The big sum I had authorized Chiang to offer for the collection, if ceded in bulk (40 'horseshoes' of silver, about Rs. 5,000, which I should have been prepared to double if need be), was used by him as a powerful argument. It would enable Wang to retire to his native province and a life of peace, if Tun-huang should become too hot for him. Or else he might spend it all on new structures for religious use near the cave-temple, which by his restoration he could claim to have annexed as his own with all its contents known or unknown, and thus secure much-increased merit and glory.

Difficulties encountered with priest.

Arguments and pleadings proved vain. Having before resignedly closed his eyes to my gathering whatever I thought of special artistic or antiquarian interest, the Tao-shih now manifestly became frightened by the prospect of losing his precious 'Chings' as a whole. A display of sulky petulance on his part made, for the first time, our relations become somewhat strained, and only by very careful handling did we obviate what threatened to become a breach. The Tao-shih persisted in urging with all signs of sincere anxiety that any deficiency in those piles of sacred texts was bound to be noticed by his patrons, whose publicly recorded subscriptions had helped him to clear and restore the temple; this would lead to the loss of the position which he had built up for himself in the district by the pious labours of eight years and to the destruction of his life's task. Former scruples reasserting themselves, he reproached himself for having given up sacred objects which his patrons had as much right to control as he had, and doggedly asserted the need of consulting them before taking any further step.

Agreement arrived at with Wang Tao-shih.

These discussions, carried on intermittently, helped to gain time for the clearing of the newly disclosed mixed bundles, and by the evening of the second day it was completed. But when I returned early next morning in order to start the close search of the regular Chinese bundles for any remnants of Central-Asian texts or other relics of special interest that might be hidden among their rolls, I found to my dismay that the priest, seized by a fit of perturbation and qualms, had found strength to shift back overnight almost the whole of them to their gloomy hiding-place. The exertion which this *coup* had cost him only added to the sullenness of his temper. But the quantity of valuable paintings, non-Chinese manuscripts, and other relics already removed gave us a material advantage. This, and the Tao-shih's unmistakable wish to secure a substantial sum of money for new building operations that he contemplated, led at last to what I could well consider a substantial success in our protracted diplomatic struggle. The agreement arrived at assured me fifty compact bundles of Chinese, and five of Tibetan, text rolls, besides all my selections from the 'mixed' bundles which had passed through my hands. The payment made for all these acquisitions amounted to four 'horseshoes' of silver, or about Rs. 500. When I now survey the wealth of archaeological materials alone that I carried away for this sum, the bargain may well seem great beyond credence.

Secret removal of 'selections'.

The experience gained of the Tao-shih's pusillanimous frame of mind made me doubly anxious to lose no time in removing the heavy loads of Chinese and Tibetan rolls. So far it had been my devoted Chinese secretary who night by night struggled to my tent with the loads of my daily 'selections'. But the new task being wholly beyond his strength, I sought help on this occasion

from Ibrāhīm Bēg and Tila Bai, another trusted old follower. Two midnight trips which they made to the temple with Chiang, under the screening shadow of the steep river-bank, allowed the huge sackfuls to be safely removed to my store-room without any one, even of my own men, having received an inkling. Prolonged absence from his clients in the oasis had caused the nervousness of Wang Tao-shih to increase. So as soon as our transaction was completed he hastened to resume his seasonal begging tour in the district.

Further acquisitions and packing.

In order to assuage his spiritual scruples as well as I could, and to give visible proof of grateful attachment to my 'patron saint's' memory, I had previously arranged through the priest to have one of the abandoned smaller shrines in the southern group of grottoes redecorated with a new clay image of Hsüan-tsang. The Tun-huang sculptor's work in due time produced an artistic eyesore, but widely advertised by the Tao-shih it helped to dispel suspicions about my long visit. So when a week later he returned I found him reassured that the secret had not been discovered, and that his spiritual influence, such as it was, had suffered no diminution. Thus it became possible to make him stretch a point further and allow me to acquire some twenty more bundles of Chinese manuscripts, with supplementary selections from the 'mixed' bundles, against an appropriate donation for his temple. When later on I proceeded to the packing, the manuscript acquisitions filled seven cases, such as horses could carry, while five more were required to hold the paintings, decorated textiles, and other miscellaneous relics. The safe packing of the painted silks proved to be a very delicate task needing great care, and I was glad to utilize for it the days when sandstorms made photographic work in the caves impossible. The risk of causing suspicion in Tun-huang by a sudden large order of cases was avoided by the precaution I had taken to bring some 'empties' to the site and by securing the rest by discreet instalments.

Departure from 'Thousand Buddhas'.

The forethought and care bestowed on such necessary safeguards did not remain unrequited. I had the satisfaction of seeing that the shy Tao-shih, honest in his own way, now breathed freely again. It seemed almost as if in a dim way he recognized that it was a pious act on his part to let me rescue for Western scholarship as much as circumstances would permit of those ancient Buddhist relics which local ignorance would allow to lie here neglected or to be lost in the end. When I finally took my departure from the 'Halls of the Thousand Buddhas', his quaint, sharp-cut face had resumed its customary expression of shy but self-contented serenity. We parted in fullest amity. But the most gratifying proof I received of the peaceful state of his mind was when, on my return to An-hsi four months later, he agreed to give up, for that 'temple of learning' in the distant West of which I had told him so often, another big share of the Chinese and Tibetan manuscripts in the shape of over two hundred and thirty compact bundles. How this was successfully achieved through Chiang Ssŭ-yeh's persuasive diplomacy and in perfect secrecy has been told in my Personal Narrative.[4] But it was only when all the twenty-four cases heavy with manuscripts rescued from the priest's precarious keeping, and the five more filled with paintings and other art remains from the same hoard, had been safely deposited in the British Museum that I could feel true relief.

Section IV.—SUBSEQUENT INVESTIGATIONS OF THE DEPOSIT

Detailed record of observations.

In giving above so full an account of my efforts and labours at the old library hidden away in Wang Tao-shih's temple I was guided mainly by two considerations. On the one hand, it was regard for the exceptional importance which may be claimed for this great deposit of early manuscripts and art remains, probably the largest ever brought to light in modern times within the

[4] See *Desert Cathay*, ii. p. 339.

limits of Central Asia or the Far East. On the other, the fact of my having been the first European scholar to see and partially examine it *in situ* has imposed upon me the obligation of recording in detail whatever observations I made concerning the conditions in which these relics had survived, and also whatever information may be useful to explain the character and extent of the collection I succeeded in bringing away. The same quasi-antiquarian reasons make it appear desirable for me to supplement this chapter by brief notes about the fortunes undergone by the contents of this remarkable hoard since my visit to it.

M. Pelliot's visit to Ch'ien-fo-tung.

It was a most happy circumstance, and one for which all students of ancient China have particular reason to feel grateful, that just within a year after my own first visit to the 'Caves of the Thousand Buddhas' the ancient remains at the site, including all those I had been obliged to leave behind in Wang Tao-shih's cave, came to be examined by a scholar so exceptionally qualified for their full elucidation, especially on the Sinologist side, as Professor Paul Pelliot. This distinguished French savant, entrusted with an archaeological mission in Eastern Turkestān and Western China, had first received information about the Ch'ien-fo-tung *trouvaille* from cultured Chinese officials of high rank whom he met during his stay at Urumchi in the autumn of 1907.[1] Having fixed his attention from the start upon the detailed exploration of this site, he reached Tun-huang at the beginning of February, 1908. There he put himself into touch with Wang Tao-shih after a preliminary visit to the caves, and on March 3 he secured access from him to the rock-cut chamber where the hoard continued to be kept.

Scrutiny of Chinese manuscript rolls by M. Pelliot.

The remarkably wide range and critical thoroughness of his attainments made it easy for Professor Pelliot to realize at once the great importance of the manuscript treasures still left there. This was particularly the case with regard to different classes of texts represented among the Chinese rolls which formed the great bulk. With an energy and persevering zeal fully equal to his great Sinologist knowledge he threw himself into the task of effecting a rapid scrutiny of all these masses of rolls. Crouching within the small chamber itself, he completed this for what he estimates at a total of about 15,000 separate texts, notwithstanding the additional difficulties created by the fragmentary state of so many among them. Complete unfolding and examination, he believes, would have taken at least six months, but, proceeding at a rate which amounted to about 1,000 rolls per diem for the first ten days or so, he succeeded in picking out any non-Chinese manuscript remains on detached leaves or rolls that turned up, and all those many Chinese texts which for philological, antiquarian, or other reasons appeared to offer special interest.

Wang Tao-shih's re-assured attitude.

Wang Tao-shih appears to have observed towards M. Pelliot more or less the same attitude as in my case. There is little doubt, however, that he must have meanwhile gained a good deal more assurance through the experience of his previous transaction with me. It had provided welcome funds for his cherished pious building activity, and yet, owing to the strict discretion observed on our part, left him in undiminished control of the bulk of his precious bundles and in full enjoyment of his local reputation.[2] Whatever his motives and calculations may have been, he

[1] See *Bulletin du Comité de l'Asie française*, janvier 1910, p. 21. This number of the periodical, pp. 11–24, reproduces the *Conférence de M. Paul Pelliot*, delivered on December 10, 1909, at the Sorbonne, and furnishes in it a general account, the fullest at present accessible, of Professor Pelliot's expedition, illustrated by excellent photographs of M. Nouette.

Professor Pelliot's labours at Ch'ien-fo-tung form the subject of a very interesting preliminary report, prepared at the site under the date of March 28, 1908, and published in M. Pelliot's article *Une bibliothèque médiévale retrouvée au Kan-sou*, *B.É.F.E.O.*, viii (1908), pp. 501–29. It is from this article that the information so far available about his operations at the Thousand Buddhas of Tun-huang is mainly derived.

[2] Considering what I knew of Wang Tao-shih's quaint diplomacy, and in view of the pious interests he obviously wished to serve, I could not feel surprised at his having kept M. Pelliot from forming a correct estimate both as to the length of time during which he had allowed me to search his

was still unwilling to listen to any proposals implying a cession *en bloc*; but he allowed Professor Pelliot to remove all his 'selections' against an appropriate compensation.[3]

M. Pelliot's agreement as to date of deposit.

I need not emphasize here the high value of the selected materials thus safely transferred to Paris. Nor is this the place to assess the value of the manifold fruitful researches which they have rendered possible for a brilliant group of French Orientalist scholars. But there are two points having a direct archaeological bearing with regard to which M. Pelliot's researches have furnished collateral evidence of such particular value as to call for mention here. Both points concern the important question as to the approximate date when the deposit of manuscripts and other relics was finally walled up. This question had already received careful consideration from Professor Pelliot while working on the spot, and it is a matter of no small gratification to me that the reasoned conclusion to which he was led entirely accords with the one I have explained above.[4] This I had occasion publicly to record when I embodied my original notes in the lecture that I delivered before the Royal Geographical Society in March, 1909, long before I became acquainted with M. Pelliot's paper.[5] Just as the many dated documents found in the 'mixed' bundles had enabled me 'to determine that the walling-up of the chamber must have taken place soon after A.D. 1000', so Professor Pelliot, too, primarily lays stress upon the fact that the latest *nien-haos* borne by the Chinese documents which he examined are those corresponding to the periods A.D. 976–83 and A.D. 995–97, within the first two reigns of the Sung dynasty.[6] He adds: 'De plus, il n'y a pas, dans toute la bibliothèque, un seul caractère *si-hia*. Il est donc évident que la niche a été murée dans la première moitié du XIe siècle, et probablement à l'époque de la conquête *si-hia* qui eut lieu vers 1035.'

Inferior writing and paper of later manuscripts.

Professor Pelliot's Sinologue knowledge enabled him to recognize clear evidence of the decadence which took place in the Chinese civilization of Tun-huang during the tenth century in the careless writing of the documents belonging to that period. Together with the distinctly inferior paper which I, too, had soon learned to recognize, it provides a safe criterion for distinguishing such manuscripts as the monks of that late epoch still produced from the fine calligraphic rolls of the

hoard and as to the extent and character of my 'selections'; see *Une bibliothèque médiévale*, *B.É.F.E.O.*, 1908, p. 505. M. Pelliot was himself enabled to rectify his impressions when, for the best part of two weeks in June, 1910, he gave the great benefit of his expert, if rapid, examination to the Chinese manuscripts brought back by me from Wang's cave. He then arrived at the estimate recorded below (see p. 917) that they comprise about 3,000 rolls, complete or of considerable dimensions, and about 5,000–6,000 detached pieces, i.e. documents, or fragments of texts.

Nor would it be, perhaps, right to blame the good priest too much for having apparently misled M. Pelliot as to the payments made by me and the manner in which he received them. To the credit of his personal honesty I may here mention that, on my second visit in 1914, he took special care to produce the public accounts of his shrine, showing that all sums he had received from me had been duly entered for its benefit and none kept back for private use. So, in spite of his queer diplomatic attempts, I retain my belief in Wang's genuine devotion to his chosen pious task. There was abundant evidence of the use to which he had put all those silver 'horseshoes' in the pile of new shrines and pilgrims' quarters I saw in 1914 erected in front of his cave-temple.

[3] Cf. *Conférence de M. Pelliot, Bulletin du Comité de l'Asie fr.*, 1910, p. 21. M. Pelliot there estimates the quantity of his selections at about one-third of what he found in the chamber. Of the approximate total of 1,130 'library' bundles which I counted on clearing it out there ought to have remained at the time of his visit about 860 bundles.

Of the great variety of the Chinese materials rescued in M. Pelliot's selections, and the extreme interest which many among them offer for Sinologue studies and research in other directions also, the vivid glimpses presented in M. Pelliot's paper, *B.É.F.E.O.*, 1908, pp. 508 sqq., convey a striking impression. This is fully borne out by such particular Chinese texts as he, partly in collaboration with M. Chavannes, has hitherto been able to publish from his collection.

For a summary indication of the number of text pieces in Brāhmī and Uigur (or Sogdian) scripts, see *B.É.F.E.O.*, 1908, p. 507. These have supplied materials for quite a series of important papers by MM. Gauthiot, Meillet, Pelliot, and Sylvain Lévi, in the *Journal Asiatique*, *Mémoires de la Société de Linguistique*, etc.

[4] See above, pp. 820 sq.

[5] Cf. my *Explorations in Central Asia*, *Geogr. Journal*, 1909, July, September, p. 42 of reprint.

[6] Cf. Pelliot, *B.É.F.E.O.*, viii. p. 506.

seventh and eighth centuries with their beautifully smooth and tough paper. M. Pelliot rightly emphasizes the fact, illustrated also by the later dated paintings in my collection, that this steady decay must have been well advanced before the Hsi-hsia, or Tangut, conquest. The entire absence of any Hsi-hsia writing among the contents of the walled-up chamber was noted by us both. But it is a discovery made by Professor Pelliot elsewhere on the site which gives to this negative evidence its distinct chronological weight, and to which special attention must be called here.

Manuscripts and prints of 13th–14th cent. found in other grottoes.

On clearing two late grottoes belonging to the northernmost detached group and decorated in pure Tibetan style, he found there some torn manuscript and printed remains of the thirteenth and fourteenth century in Chinese, Mongolian, and Tibetan, and, besides a little of Brāhmī, also some fragments of Hsi-hsia prints.[7] This discovery makes the total absence of the Hsi-hsia script among those thousands of texts and documents in Wang's *cache* all the more significant. But even more important is the help it offers for clearing up what otherwise might appear a serious antiquarian puzzle. Among the materials that I secured from that deposit there are, as mentioned above, a small number of Uigur texts in the form of books, stitched and folded after the Western fashion, and all remarkably well preserved (for specimens see Plates CLXIII–CLXV).[7a] Two of them are written on one side of sheets of thin paper, of a kind not otherwise met with among the contents of the deposit, but recalling that found in Chinese prints of later times. In one of the manuscript booklets, Ch. xix. 003 (Plate CLXV), containing like the rest a Buddhist text translated from Chinese into Uigur Turkish, Dr. (now Sir) E. Denison Ross, who had undertaken a detailed examination of all our Uigur texts, discovered a colophon in which he recognized, as he believed, a date corresponding with A.D. 1350. In the course of the discussion which followed a paper on 'Western Manichaeism and the Turfan Discoveries', read by Mr. Legge in 1912 at the Royal Asiatic Society, Dr. Ross mentioned this dated colophon, and expressed the conclusion that it proved the Ch'ien-fo-tung hoard to have been walled up at least three hundred years later than M. Pelliot and I had assumed.

Colophon assumed to date from A.D. 1350.

Probable provenance of Uigur booklets.

Not having received previous information of Dr. Ross's interesting discovery, and being away in India at the time, I had not been able to inquire more closely into the chronological problem thus raised before Dr. Ross, after further consideration, saw reason to modify his conclusion.[8] From information communicated to him by Professor Pelliot it appeared that the grottoes of the northernmost group belonging to the Mongol period had been searched by Wang Tao-shih subsequent to his great discovery of 1900, and that he had found in them a few manuscripts. Two of these small caves of later date remained untouched by Wang's 'treasure-seeking' operations, and on clearing these M. Pelliot only came upon remains of manuscripts and prints dating from the thirteenth and fourteenth centuries, as previously mentioned, some of which were Uigur. Thus the explanation naturally offers itself that the Uigur booklet containing the colophon supposed to be of A.D. 1350 and probably also the other Uigur texts in book form are likely to represent specimens of Wang's later finds there which the priest, owing to their particularly good preservation, thought fit to add to the great book store of his original *trouvaille*.

Uigur books added from later finds elsewhere.

From this explanation, which is supported by Professor Pelliot's close knowledge of the local conditions, I see no reason to dissent. It satisfactorily accounts for the presence in the repository of all those undoubtedly old remains of a few books which are manifestly later in origin. That the priest had actually used the small chamber as a place of deposit in the way assumed is proved with certainty in the case of the small Taoist treatise printed under the Emperor Kuang Hsü (A.D. 1875–1908) which M. Pelliot mentions having found there.[9] With the explanation just given the con-

[7] Cf. Pelliot, *B.É.F.E.O.*, viii. p. 529, postscript in footnote.

[7a] See above, p. 818; also below, p. 923.

[8] See Ross, *The Caves of the Thousand Buddhas*, *J.R.A.S.*, 1913, pp. 434 sqq.

[9] Cf. *B.É.F.E.O.*, 1908, p. 506.

ditions in which I found the Uigur books in question are in full accord. The two 'mixed' bundles in which, as my notes taken at the time show, they turned up came from the top of the solid pile of regular 'library' packets, and were but loosely wrapped up in large sheets of canvas once painted. The bundle Ch. xix, from which the Uigur book with the colophon apparently dated came, was handed out to me, as I distinctly remember, practically open, and the Uigur books were lying exposed on the top. In addition to them it contained big packets of Tibetan Pōthī leaves, of different sizes and all mixed in confusion, besides small parcels, tightly fastened, of votive rags in a variety of fabrics.

Probable *terminus ad quem* of original deposit.

Summing up the facts just stated, there appears to be a strong presumption that the dated Uigur book and those of similar character represent an addition made to the old deposit between 1900 and 1907, just like the modern Taoist print above referred to. It is, of course, impossible definitely to prove that they are the *only* additions received by the hoard during those years in which, as we know, it was kept accessible for occasional visitors, repeatedly disarranged, and drawn upon for presents to donors and persons of consequence.[10] But considering that the close search made by M. Pelliot and that which, in the case of my own collection, was subsequently carried out at the British Museum have failed to bring to light among those many thousands of texts and documents any others of probably later origin, it must appear very unlikely that any other additions actually occurred within those few years following the discovery of 1900. The same argument holds good also, as far as archaeological reasoning can go, against any theory which would assume that the deposit was walled up at some date later than the early part of the eleventh century, and, perhaps, was reopened and closed again between that period and the year 1900. But it must be admitted that the antiquarian evidence available for the *terminus ad quem* is not such as would be accepted as conclusive in a court of law. Nor would it be reasonable to expect this, considering the conditions under which the discovery of 1900 actually took place and those since prevailing at the site.[11]

Fate of manuscripts left behind with the Tao-shih.

It only remains for me to relate briefly the fortunes of the still very considerable stock of the old library which remained in Wang Tao-shih's keeping after M. Pelliot's visit. The news of the important Chinese manuscripts discovered and brought away by him had quickly spread among men of learning in China, through the report published at Hanoi and probably otherwise also. During Professor Pelliot's stay at Peking in the early part of 1909, Chinese scholars of the capital, including a learned viceroy, had eagerly studied and photographed any precious manuscripts that he had kept with him.[12] So it did not take long before an order was issued by the central Government directing the prompt transmission of the whole library to the capital, a substantial sum in compensation being decreed for those in charge of the temple.

Removal of manuscripts to Peking; losses *en route*.

The information I received on my return to Tun-huang in March, 1914, left little doubt as to the characteristic manner in which this well-intentioned order from headquarters had been carried out, apparently towards the close of 1909 or soon after. According to the statement of Wang Tao-shih, who hastened to welcome me back as an old and cherished patron, the large sum of money assigned in compensation to his temple had completely vanished *en route*, being duly absorbed, no doubt, in its transit through the different Ya-mêns. The whole collection of manuscripts

[10] Cf. Pelliot, *B.É.F.E.O.*, 1908, p. 506.

[11] The explanations here given render it unnecessary specially to discuss the remarks made by the late Mr. H. Amedroz in his note, *J.R.A.S.*, 1913, pp. 694 sqq., with reference to Dr. Ross's above-quoted statement. Based as they necessarily are on preliminary information obtained second-hand, they can touch only what may be called the quasi-legal aspect of the question. I may, however, rectify a statement (p. 695, clause 2) which is due to some misapprehension. There is nothing in my narrative—*Desert Cathay* is meant—justifying the belief that the manuscript dated A.D. 1350 'came out of one of the "compact bundles" piled in the walled-up library'.

[12] Cf. *Bulletin du Comité de l'Asie fr.*, 1910, pp. 23 sq.

was taken away in carts, packed in a very perfunctory fashion, and after some delay at the Tun-huang Ya-mên started on its long way to Peking. A good deal of pilfering was known to have occurred already while the carts were kept waiting at Tun-huang, as proved by the bundles of fine Buddhist text rolls of T'ang times which were brought to me for sale there, and acquired at modest rates. The guarding of the convoy must have been equally careless further on, as similar opportunities for rescuing relics of the great *cache* were also offered to me at Su-chou and Kan-chou. Other packets of Ch'ien-fo-tung rolls must have been carried away into Hsin-chiang, where I was shown a number of such old manuscripts at different Ya-mêns and could myself secure some more from Chinese petty employés, etc. I must leave it to others to ascertain how much of the original collection actually arrived in Peking, and what care it has found there.

Manuscript acquisitions renewed in 1914.

In view of the official treatment which Wang Tao-shih's cherished store of 'Chings' had thus suffered, I did not feel surprise at his now expressing bitter regret that he had not possessed the courage and wisdom to accept the big offer I had made in 1907 through Chiang Ssŭ-yeh for the whole collection. His devout *clientèle* among the Tun-huang population, seeing how well he had laid out the sums received, first from myself and then from Pei Ta-jên, i.e. M. Pelliot, in building new gaudy chapels and a large, comfortable hospice, seemed to agree in sharing his feelings. They, no doubt, fully approved too of the shrewd precaution which the honest Taoist monk had taken against the official spoliation of the temple becoming too complete. Before the removal above referred to, supposed to be wholesale, took place, he had managed to store away in a safe place a nest-egg, as it were, of such Chinese manuscripts as he conceived to be of special value. It must have been considerable in extent; for even after what Mr. Tachibana in 1911 had been able to acquire from this reserve store, there remained enough to allow me to carry away, as a fruit of my renewed pilgrimage to the site, five cases filled with Chinese manuscript rolls, most of them in a particularly good state of preservation. That the donation made in return to the shrine had to be raised in proportion to the increased fame of the original hoard is obvious—and equally also the doubt whether the reserve has even now become completely exhausted. And here 'the Prieste's Tale' from the Caves of the Thousand Buddhas may fitly end for the present.

CHAPTER XXIII

PICTORIAL REMAINS FROM THE THOUSAND BUDDHAS

Section I.—RECOVERY AND STUDY OF THE PAINTINGS

Among all the varied contents of the walled-up chapel with which the hurried 'excavation' described in the preceding chapter had acquainted me, there were none of which I could more easily recognize the interest and value than the mass of pictorial representations embedded in miscellaneous bundles and within packets of manuscript rolls. It was fortunate in more than one way that Wang Tao-shih's attitude towards this class of relics was one of indifference. Neither their artistic merit nor their religious character seemed to make any special appeal to him, and this greatly facilitated my 'selection'. Thus, in spite of the difficulties attending my rapid search, I succeeded in carrying away for my collection by far the greatest portion of all that the hiding-place had preserved in the way of paintings, drawings, and similar art remains. This and the wider interest which may be claimed for them justify our turning to them in the first place. Gathering of pictorial remains.

In the course of that hurried gathering in Wang Tao-shih's shrine it was impossible to spare time for any closer inspection of these fine relics of Buddhist pictorial art. But the condition in which I discovered them, and the trouble which their subsequent safe packing cost me, made me feel doubly grateful at the time for the chance of rescuing them from the priest's careless handling. The majority of them were painted on very fine silk, some of gauze-like texture, the material of the rest being either linen or paper. The prevailing use of the more precious material, silk, was gratifying in itself; for I soon realized that superior care and technique in the painting ordinarily accompanied it. But equally clear it was that the fineness of the material had exposed these pictures to increased risks of damage and greatly added to the difficulties of safe transport and examination. Some of the narrow painted banners first recovered from 'miscellaneous' bundles were found, indeed, neatly rolled up, and the pliable and soft condition that their silk material had retained allowed them to be unfolded with ease. Embedded amidst votive rags, crumpled-up papers, and the like, their fabrics had been protected from pressure and consequent hardening. Their condition at discovery.

But pictures emerging from other bundles had fared far worse. Those found tucked away among the heavy Chinese rolls of regular 'library bundles' showed plainly under what crushing weight they had lain for centuries. Pressure had turned them into tight little packets, so hard and brittle that their delicate fabric would break or flake off at any attempt to open them on the spot. The big silk paintings, ranging as examination has since shown to over seven feet in height, had necessarily suffered much more damage from this compression of close on nine hundred years and from the neglect that they are likely to have undergone before. Some appeared to have been folded up at the time of their deposition in a more or less regular fashion. But I could not open out even these completely from fear of increasing the damage they had already undergone at the creases.[1] Most of the large pictures, however, or of the fragments once forming part of them Damage to silk paintings.

[1] The damage caused by this original folding and creasing can be seen only too plainly in some of the large paintings reproduced, e.g. in Pl. LVII, LX, LXIII, LXVIII, LXX, etc.

presented themselves merely as shapeless hard packets of crumpled-up silk of which it was quite impossible to determine the contents.[2] Such inspection as was possible at the time in the case of others furnished ample proof, in the shape of dirt-encrustation, rough stitching, coarse paper-backing, and similar repairs, of the fact that many of these large paintings had been exposed, for a long time before their final deposit, to neglect and damage from incense smoke, dust, and the like.

Treatment of silk convolutes.

The careful packing of all these convolutes of often extremely brittle fine silk proved a difficult task, and still more their opening out when they had safely reached the British Museum. Fortunately all the technical resources of the Department of Prints and Drawings were made available for this task, and its labours, extending over more than six years, succeeded in overcoming the difficulties. Most of the paintings, whether big or small, had to undergo a special chemical treatment before they could be safely opened out by expert hands and made accessible for examination.[2a] Many surprises attended this portion of the work; for from some of the least promising convolutes, when their contents of crinkled and friable silk had been restored to their original condition of suppleness, there came to light unsuspected pieces of fine paintings, often of great artistic value, even when fragmentary. In this way portions missing in some large composition were occasionally recovered from a different conglomeration of what looked like dirt-encrusted silk rags.

Treatment of silk paintings.

After the painted surface had been cleaned with extreme care, each painting on silk had to be strengthened to make it quite safe for handling. The small silk banners were temporarily mounted on a fine gauze with large meshes which allowed the reverse surface, in their case also usually painted, to be examined, and they were subsequently fixed under sheets of glass. The large compositions had to be first provisionally backed and mounted with thin sheets of Japanese paper, which made it possible to roll them up in the traditional fashion of the Far East for convenient keeping. It was while they were in this stage that most of the silk paintings shown in the plates of the present publication had to be reproduced during the years 1911 and 1912.[3] The final mounting of these hundreds of paintings on a permanent background of suitably chosen Japanese silk stretched over a light wooden frame was a further task requiring much care and time, and owing partly to the effects of the war it is not quite completed even now (1917). For the publication referred to below the later date fortunately permitted the selected specimens of paintings to be reproduced in their final mounting, which does better justice to their character as works of art.[4]

Mounting of silk paintings.

All these protracted labours have been carried on under constant and careful supervision, mainly that of Mr. Laurence Binyon. To his unfailing knowledge and care, and to the help given by Sir Sidney Colvin at the beginning, all students of these fine remains of Buddhist art owe gratitude for the ease with which they can now be examined. Any attempt at restoration has been scrupulously avoided. But it has not always been possible to retain what remained of the outer border in plain silk or other cloth which originally framed the larger silk paintings and served for their hanging; for the contraction undergone by this different material would have endangered the preservation of the painted surface when it was mounted.[5] In a few cases the original border was replaced by strips of suitable Japanese brocade applied after the traditional Kakemono fashion and plainly indicating its modern date. The methods of preservation and treatment above

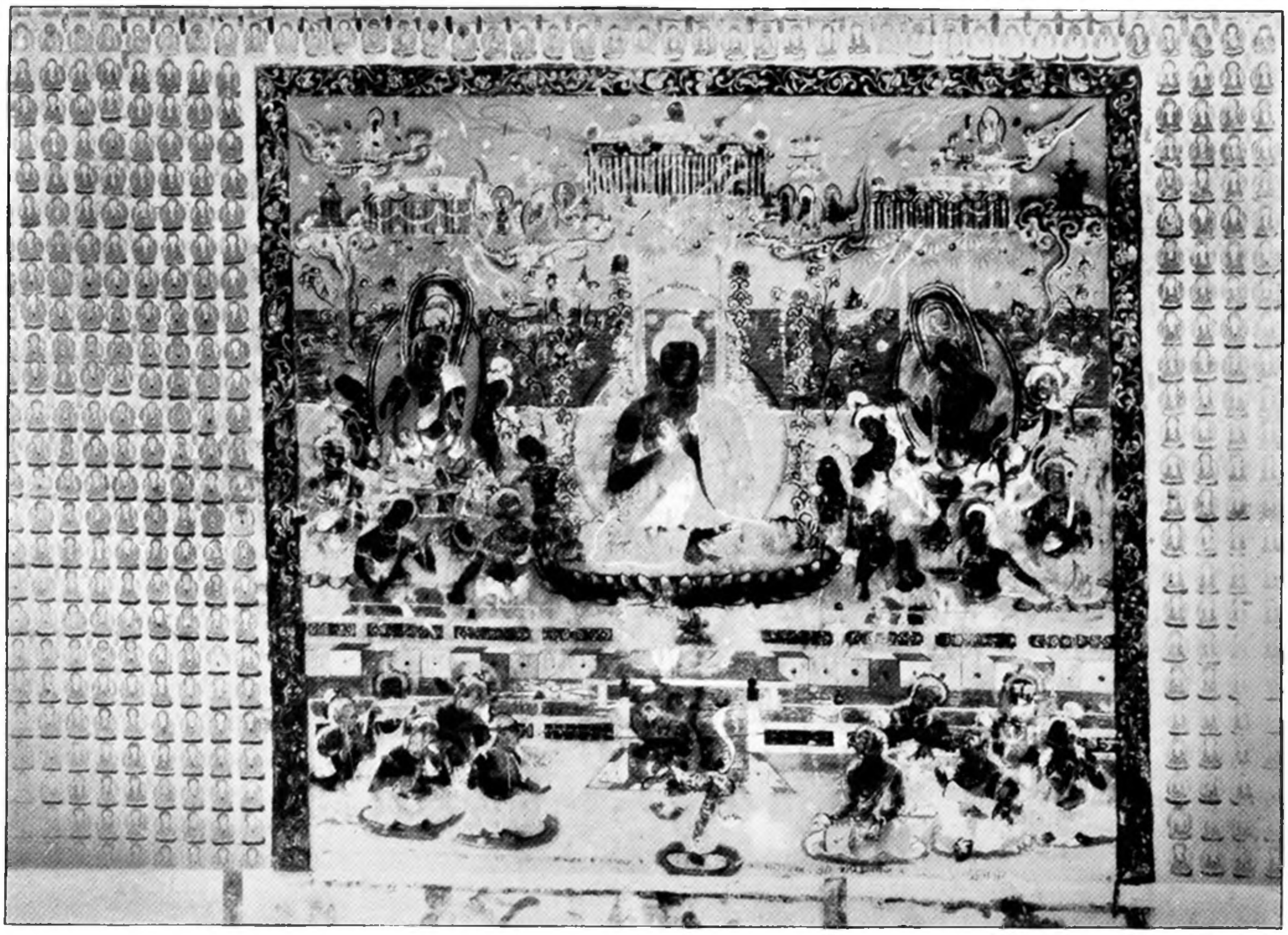
[2] For a specimen of such a packet, unopened, containing the painting Ch. 00350, see Pl. LXXVI; also Ch. lviii. 006 in *Journal of Indian Art*, October, 1912.

[2a] Regarding the very valuable assistance rendered in this work by the late Mr. S. W. Littlejohn, cf. *Burlington Magazine*, 1918, p. 19.

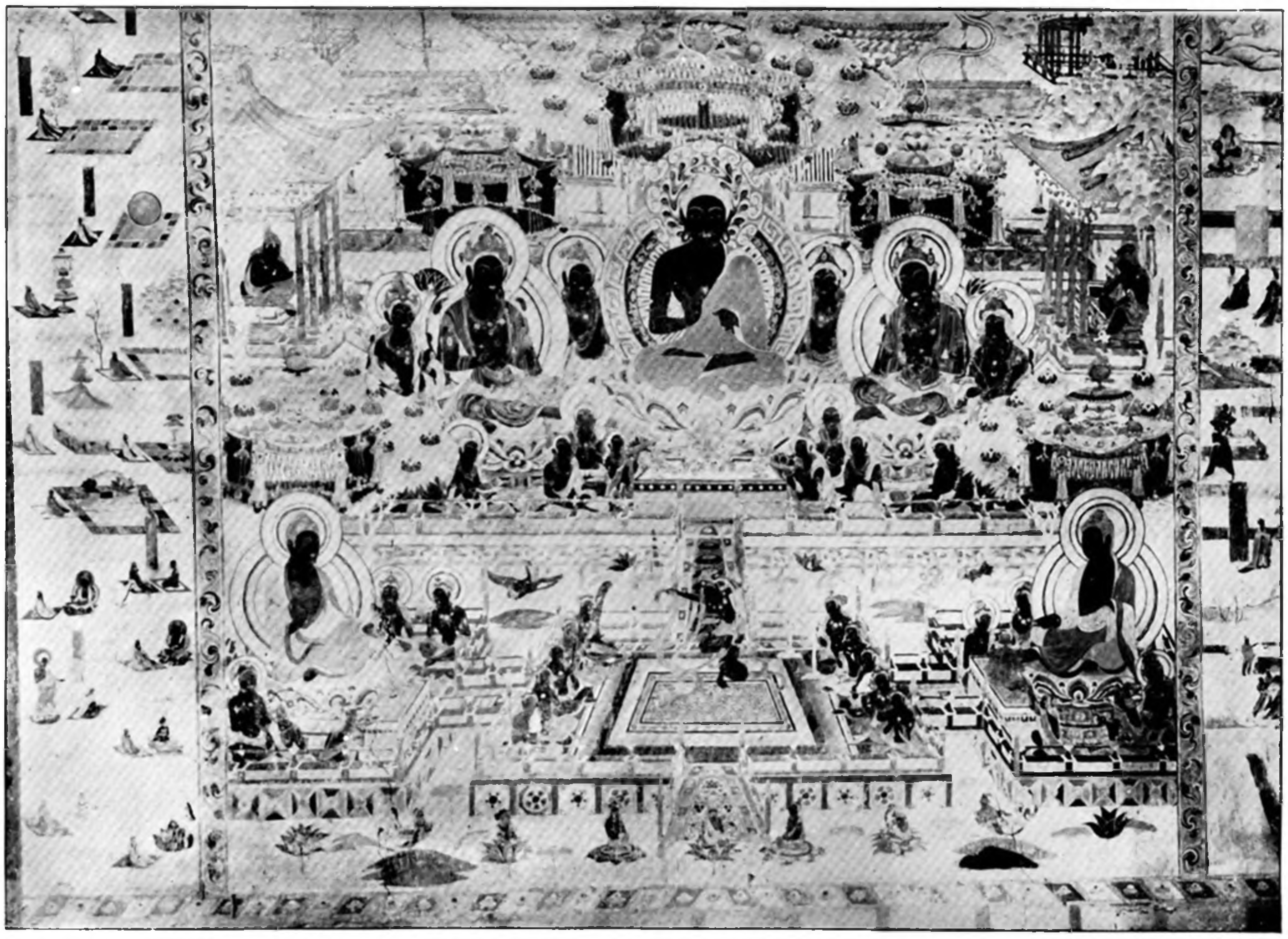
[3] See, e.g., Pl. LVII, LX, LXII, LXIII, LXIV, LXVIII–LXX, LXXIV, etc. In Pl. LVI, LVIII, LIX, the paintings are shown as finally mounted on silk.

[4] Thus Pl. LXIII may be compared with the reproduction of the same painting in *Thousand Buddhas*, Pl. XVII.

[5] Such original borders, or remains of them, are seen, e.g., in Pl. LVII, LVIII, LX–LXVIII, LXXIII. Pl. LX illustrates a case where the original border had to be severed in places before even provisional mounting of the painted silk was possible without damage.



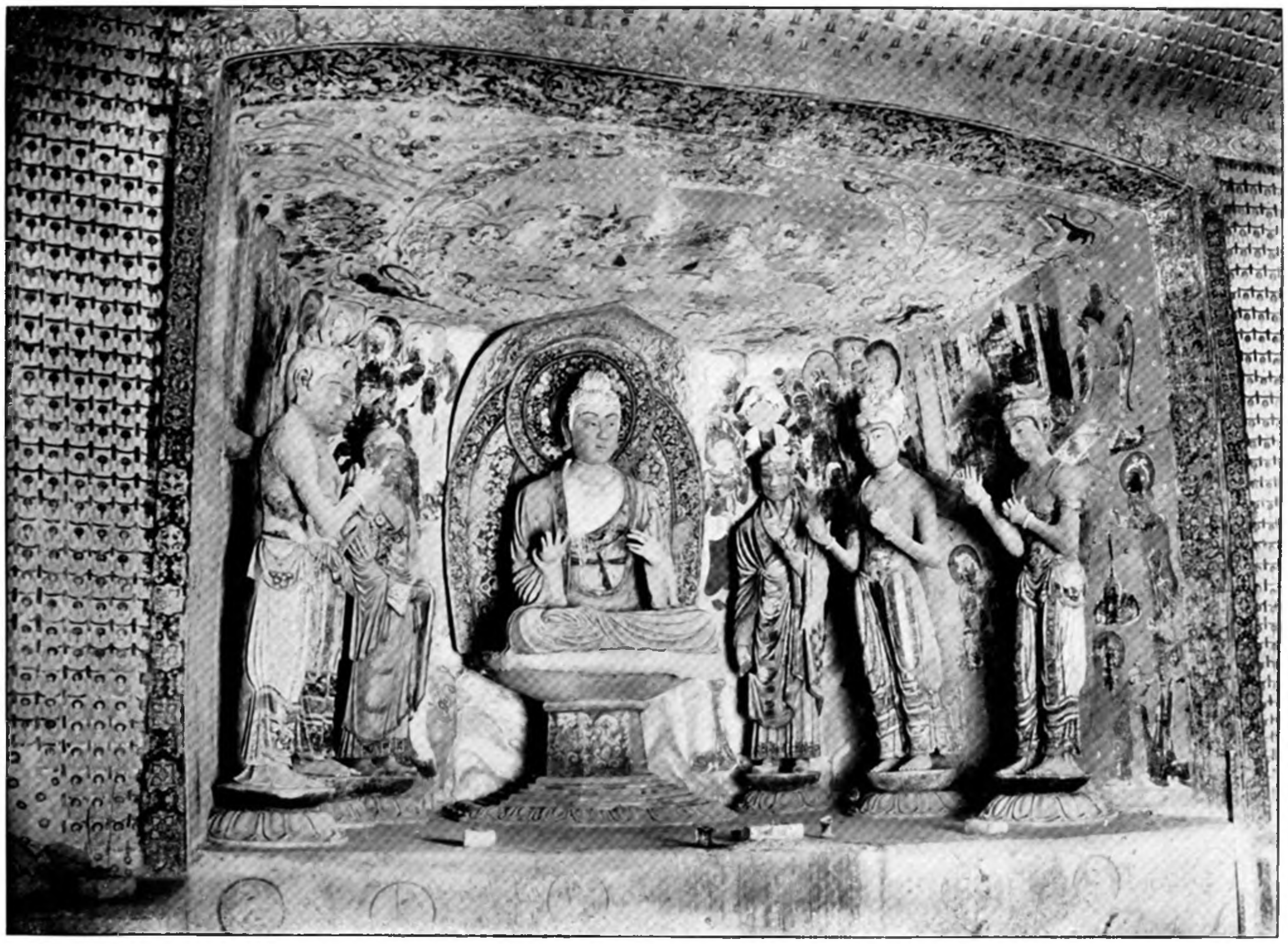
209. CENTRAL PAINTED PANEL SHOWING WESTERN PARADISE SCENE ON NORTH WALL OF CAVE CH. III. A, CH'IEN-FO-TUNG.



210. CENTRAL PAINTED PANEL, REPRESENTING AMITĀBHA'S PARADISE, ON NORTH WALL OF CAVE IV, CH'IEN-FO-TUNG.

The side scenes represent Ajātaśatru's story and Queen Vaidehī's meditations.

211. RAISED RECESS WITH REMAINS OF STUCCO IMAGES, ON WEST SIDE OF CAVE CH. V, CH'IEN-FO-TUNG.



212. ALCOVE WITH STUCCO IMAGES, PARTIALLY RESTORED, AND TEMPERA PAINTINGS, ON WEST SIDE OF CAVE CH. VI, CH'IEN-FO-TUNG.

described have been followed also *mutatis mutandis* in the case of the paintings on linen and paper. But while to the cheaper and less delicate material usually corresponds a lower grade of artistic merit, on the other hand the greater strength of the material has helped to reduce the labour involved in the safeguarding of these paintings.

Artistic interest of paintings.

The far-reaching artistic interest of these pictorial remains and their importance for the history of Buddhist worship and iconography in Central Asia and the Far East had already greatly impressed me when I first beheld them in their original place of deposit. But only as the progress of the work of preservation at the British Museum revealed more and more the wealth and variety of all these materials could I fully realize the many points of novel interest—and the problems, too—which they raised, and the extent and difficulties of the labours which their detailed study and interpretation would need. In view of the archaeological evidence furnished by the place and conditions of discovery and by the dates then read on some of the paintings, it was clear that these pictorial remains mostly belonged to the T'ang period and the century immediately following it. Equally certain it was that they represented almost exclusively divinities and sacred scenes of Mahāyāna Buddhism as then prevailing on the western confines of China. Features derived directly from Graeco-Buddhist art, marks of the change it had undergone on its passage through Central Asia or Tibet, and the powerful impress of the art of China itself were all plainly traceable, though to a varying extent, in the subjects and style of the different paintings.

Mixture of art influences.

This mixture of influences was bound to give a special interest to the mass of new materials, but also to increase the difficulty of their proper analysis. As far as their character as works of art was concerned, the preponderance of Chinese taste and style was unmistakable from the first. The collection obviously derives additional value from this fact; for scarcely any genuine specimens of Chinese painting of the T'ang period were previously known to have survived. But at the same time the student is thus deprived of the guidance which contemporary works of Chinese religious art might have afforded. On the iconographic side, too, it soon became clear that the varied imagery displayed by the paintings, though in the main based on Indian conceptions and forms, yet bore evidence also of considerable changes and developments undergone on its transition to China and after its adoption there. Apart from the help which comparison with the later Mahāyāna Buddhism of the Far East and especially of Japan might offer, the chief hope of guidance for the interpretation of this Pantheon lay manifestly in the Chinese inscriptions which many of the silk paintings display, whether in the form of cartouches or votive records. They were likely to furnish information not merely about donors and dates, but also about the divinities, sacred scenes, etc., represented. It was obvious that for this part of my collection a collaborator was needed who with special knowledge of Buddhist iconography would combine the qualifications of a Sinologue as well as familiarity with Far-Eastern art in general.

Interpretation of sacred subjects.

My eager wish to secure such a collaborator was strengthened by the advice received from my friend M. Foucher, who in the summer of 1910 was kind enough to examine our paintings as far as they had by that time been made available for study, and from his unrivalled knowledge of Buddhist iconography to furnish me with brief but most helpful notes on the general classification of the subjects treated and on kindred iconographic points. As regards the varied characteristics of the art exhibited by the paintings I was fortunate enough to receive very valuable assistance of the same kind from Mr. Laurence Binyon, whose expert study of Far-Eastern painting had from the first led him to take much appreciative interest in them.

Collaboration of M. Petrucci.

It was through Mr. Binyon's friendly intercession that I was offered the chance of securing for this very important part of my collection an exceptionally qualified collaborator in the person of M. Raphael Petrucci. Already distinguished in more than one field of research, M. Petrucci

combined enthusiastic devotion to Far-Eastern art as a critic, connoisseur, and collector with serious Sinologue studies begun under such a master as M. Chavannes. The series of important publications bearing on the art of China and Japan which issued in rapid succession from the pen of this highly gifted savant[6] bear eloquent testimony to his eminent fitness for what was bound to prove a difficult task. After a prolonged series of visits to the collection in the autumn of 1911 M. Petrucci expressed his willingness to take up the systematic study of our pictorial relics from the 'Thousand Buddhas', the results to be embodied mainly in an extensive Appendix to the present work. I accepted this gratifying offer with deep relief and satisfaction. The task which M. Petrucci had set himself and the exhaustive plan upon which he proposed to effect it were lucidly set forth in a memorandum which he addressed to me on November 16, 1911, and which will be found reproduced below.[7]

Labours of M. Petrucci.

During the following two years M. Petrucci devoted protracted labours to the task, closely studying the paintings and their inscriptions in the originals or in photographic reproductions specially prepared for his use. He also collected voluminous extracts from Chinese Buddhist texts likely to throw light on their iconographic purport. As a first result of these studies he was able to supply me in 1913 with the draft of his introductory chapter on the votive inscriptions and the antiquarian information to be gleaned from them.[8] About the same time or early in 1914 he discussed in a separate essay those elaborate compositions, or 'Maṇḍalas', which form the subject of some of the largest and artistically most interesting paintings in the collection.[9] In addition to the above, M. Petrucci had succeeded in collecting a great mass of textual materials from the Chinese Buddhist Canon for the identification of Jātaka scenes, individual divinities, etc., which appear in the body of the paintings or on their predella-like borders, when the invasion of Belgium cut him off from his home at Brussels and all his manuscripts, etc.

Materials collected by M. Petrucci.

Under the conditions created by the world war M. Petrucci was for nearly two years unable to resume his labours on our paintings. For a great portion of this time he was fully occupied with voluntarily undertaken hospital duties in connexion with the Belgian Red Cross—for in addition to other scientific attainments he was a fully trained medical man. He found, however, occasion even then to revisit the collection and to assist with his advice in the proposed arrangements for its eventual division between the Indian Government and the British Museum. Fortunately he had succeeded meanwhile in placing his manuscripts in safety with friends on Dutch soil.[10] At the request that I made after my return to Europe in 1916 M. Petrucci arranged to have all the extensive manuscript notes, extracts, etc., bearing on his Appendix copied at Leyden under Professor de Vissers' friendly supervision. The help of the British Foreign Office subsequently made it possible to have these voluminous copies safely transmitted to M. Petrucci at Paris by the close of the year.

[6] It will suffice to mention here only the following: *Les caractéristiques de la peinture japonaise* (Revue de l'Université de Bruxelles, 1907); *Les documents de la Mission Chavannes* (Revue de l'Université de Bruxelles, 1910); *La philosophie de la nature dans l'art d'Extrême-Orient*, 1910; *L'art bouddhique en Extrême-Orient d'après les découvertes récentes* (Gazette des Beaux-Arts, 1911); *Le Kie tseu yuan houa tchouan, traduit et commenté* (T'oung-pao, 1912); *Les peintres chinois*, 1913; *La peinture chinoise au musée Cernouschi*, 1914 (in collaboration with M. Chavannes); *Les peintures bouddhiques de Touen-houang, Mission Stein* (Annales du Musée Guimet, xli: Conférences faites au Musée Guimet en 1914), 1916.

[7] Cf. Appendix *E*, I.

[8] This chapter, as finally revised by M. Chavannes after M. Petrucci's death, will be found reproduced below as the second portion of Appendix *E*.

[9] This essay, which appears to have been intended in the first place for separate publication but would, no doubt, have been utilized also for the corresponding chapters of M. Petrucci's Appendix, will be found printed below in Appendix *E*, III.

[10] In explanation it may be mentioned that M. Petrucci, though brought up and educated in France, had inherited from his father the status of an Italian subject, a circumstance which during the early period of the war was of special help to him in regard to the above arrangement.

To see his materials rescued and made available again for the completion of a cherished task was the last satisfaction which Fate would grant to this enthusiastic worker. On my way through Paris in May, 1916, I had found him still full of apparent vigour and eagerly bent upon carrying through his task. But some months later he began to suffer from an internal ailment, and though in the autumn he was still strong enough to lend most willing help towards the preparation of the portfolio, *The Thousand Buddhas*, by which I hoped to make select specimens of paintings from the collection accessible to students of Far-Eastern art in adequate reproductions, his condition became serious enough to necessitate a grave operation in February, 1917. This he overcame with apparent success, only to succumb a week later by a cruel blow of Fate to diphtheritis contracted in the hospital.

Last help of M. Petrucci.

How great the loss is which manifold researches bearing on the art and civilization of the Far East have suffered through M. Petrucci's death, still young in years and full of promise for the future, has been eloquently recorded by others more competent than myself.[11] Here it is my part merely to explain the endeavour made with the kind co-operation of common friends to preserve as much as possible of M. Petrucci's work and thus to render the gap left in the present publication less conspicuous. The two chapters which he had actually written out, as above mentioned, on the votive inscriptions and on the large 'Maṇḍala' compositions have been carefully prepared for printing by M. Chavannes with the assistance of MM. Foucher and Sylvain Lévi. Mr. A. D. Waley, of the British Museum, also lent valuable help by the verification of Chinese inscriptions in the originals. The abundant materials M. Petrucci had prepared for the identification of the numerous legendary scenes and other sacred subjects represented in a dozen or so of the large paintings, and for the elucidation of the inscriptions concerning them, were to be utilized by M. Chavannes in a separate volume which he proposed to publish under M. Petrucci's name and his own in the *Mémoires concernant l'Asie orientale* of the Académie des Inscriptions. [Since this was written, M. Chavannes has, alas, passed away too, and it remains doubtful how much of the materials he had prepared for a tribute to the memory of his devoted pupil and friend can be preserved by publication.] In addition the present work is to benefit by the expert help of Mr. Binyon, who has kindly undertaken to replace the concluding chapter of M. Petrucci's programme by a contribution dealing with the position occupied by our paintings in the evolution of Buddhist Art in the Far East and with the varied influences reflected in them from the side of India, Central Asia, and Tibet.[12]

Endeavour to replace lost help.

However great is the value which may justly be claimed for all these materials, it is clear that they leave me with a heavier obligation in regard to this portion of my Report than I anticipated while hoping for the realization of M. Petrucci's programme. That I am able to meet to some extent this changed situation I owe mainly to preceding safeguards. In the interest of future and more detailed researches by other scholars I had taken care in 1911 to use as many plates as available means would allow for the reproduction of characteristic specimens of the different classes of paintings, drawings, and woodcuts. For the same reason I took special care to secure a sufficiently detailed description of all pictorial materials in order to provide needful guidance also as regards the many paintings, etc., that had to be left without illustrations. This Descriptive List, reproduced below in Chap. XXV, Section ii, has been prepared mainly by the hand of Miss Lorimer, whose devoted help over this task I cannot value too highly. In it has been embodied also much useful

Descriptive list of paintings.

[11] Cf. the notices devoted to the memory of M. Petrucci's life and work in learned periodicals, e.g. *T'oung-pao*, 1917, p. 391.

[12] Cf. below, Appendix *E*, IV. A very illuminating if succinct review of these questions, so important for the history of the development of Chinese pictorial art in general, was furnished by Mr. Binyon in 1914 in the introductory notes he wrote for section I of the *Guide* to the portions of my collections then temporarily exhibited in the British Museum; see *Guide to an exhibition of paintings, manuscripts and other archaeological objects collected by Sir Aurel Stein in Chinese Turkestan* (Printed by order of the Trustees), 1914, pp. 5 sqq. [See now also his *Introductory Essay* to *The Thousand Buddhas*.]

information on artistic points received from Mr. F. H. Andrews and on inscriptions from Dr. L. Giles and Mr. A. D. Waley, and the valuable iconographic indications which expert Japanese scholars like Professor Taki and Mr. Yabuki were kind enough to furnish on their visits to the collection.

Systematic grouping of pictorial remains.

For reasons of practical convenience it has been necessary to preserve in this Descriptive List the order of the 'site-mark' numbers originally given to the objects as they emerged from the bundles searched at the cave-temple or subsequently from those which had to be carried off, in bulk as it were, to be examined later at the British Museum.[13] It is obvious that with this numerical order of entries dependent on chance the Descriptive List itself could not serve for a systematic review of the pictorial relics. For this purpose it is necessary to arrange them first into definite groups, and by comparison of the individual pieces within each to determine the essential characteristics of their iconography and artistic execution. This task was the primary one among those to which M. Petrucci had proposed to devote the second main portion of his study.[14] Since death has stayed his hand, I feel now compelled to attempt it in the interest of the present work, but with a scope necessarily reduced to my restricted competence.

Limitations of survey.

The serious limitations imposed upon me are obvious. While familiar to some extent with the iconography of Graeco-Buddhist art and such remains of Buddhist art in the Tārīm Basin as I had the good fortune to bring to light myself, I have never found leisure so far for a systematic study of the religious art of the Far East or Tibet, nor even for that of Central-Asian Buddhist art as displayed by the frescoes, etc., recovered in the northern oases of Chinese Turkestān. To these limitations must be added my want of Sinologue qualifications and the fact that the present chapter has to be written far away from my collection and solely with such help as Miss Lorimer's descriptions, plates, inventory photographs, and memory furnish. May the circumstances already referred to and the claims made upon my time by other tasks help to excuse any shortcomings in this chapter.

For the classification of the paintings and drawings I can fortunately avail myself of the guidance afforded by M. Petrucci's memorandum and by the briefer, but equally helpful, notes with which M. Foucher favoured me on his visit to the collection in 1910.[15] It is certain that neither the varying material on which the pictures are painted, silk, linen, or paper, nor such differences of style and date as examination may reveal in the present state of our knowledge, would form an adequate basis of classification. A grouping by subjects thus becomes necessary, and iconographic considerations make the following scheme appear to me the most convenient.

Classification of paintings by subjects.

The first place may be suitably allotted to the silk banners which represent legendary scenes from the life of Gautama Buddha. It is significant for these scenes that their treatment is frankly and purely Chinese. We shall next proceed to the specifically 'iconographic' paintings, which divide themselves into two broad categories, according as they are consecrated to individual divinities or to whole groups or assemblages of divine figures. Allowing in the former the first place, as seems fitting, to the rare representations of Buddhas, we shall then review the far more abundant pictures showing different Bodhisattvas, whether alone or with attendants and worshippers. Among them it will be advisable to treat first the very numerous banners. The single divinities shown in them can rarely be definitely identified. But they may conveniently be grouped by the type of figure represented, according as it adheres more or less closely to models

[13] The contents of bundles searched at the Thousand Buddhas are distinguished by 'site-marks' showing small Roman numerals (e.g. xxi, xxxviii, lv, etc.) as bundle numbers at the beginning. Those objects which were recovered amongst manuscript bundles, etc., at the British Museum are marked with consecutive numbers, preceded by 00, after the general 'site-mark' Ch. (e.g. Ch. 0017, Ch. 00452, etc.).

[14] Cf. below, Appendix *E*, I.

[15] See above, p. 833.

originally developed in Indian Buddhist art or shows transformation by Chinese art. The larger Bodhisattva paintings can again be subdivided by purely iconographic features. A third group, well defined both in iconographic character and in style, is formed by the pictures of Lokapālas and Dharmapālas (Vajrapāṇis), which among all divine attendants of Buddhist mythology have attained most popularity in Chinese worship.

In the second category, that of paintings showing whole groups of celestial figures and mostly of larger size, we shall first review those in which assemblages and processions of divinities are represented. From them we shall turn to the sumptuous and artistically important compositions which bring before our eyes scenes of Buddhist Heavens, especially the Western Paradise or *Sukhāvatī* of Amitābha Buddha, with its abundance of heavenly personages and rich display of quasi-mundane pleasures. There will still remain for examination a group of miscellaneous pictures, mostly drawings, comprising also a few non-Buddhist subjects, sketches for paintings or frescoes, designs of the human figure or of magic purport, and the like. Finally we shall have to devote a brief notice to the woodcuts, most of them provided with text or votive inscriptions and affording proof of the considerable development which the art of wood-cutting had attained in China at a relatively early period.

SECTION II.—TIME AND *MILIEU* OF PRODUCTION

General questions of Buddhist iconography.

In the preceding section I have fully explained the reasons which render it partly unnecessary and partly impossible for me to attempt here any discussion of such general questions of Buddhist iconography and art as are raised by our collection of pictures from the Thousand Buddhas. For them I must refer the student to those portions of the full memoir planned by M. Petrucci, which M. Chavannes' kind help has succeeded in preparing for publication,[1] to the essay contributed below by Mr. Binyon's competent pen,[2] and to the succinct but stimulating account in which M. Petrucci in 1914 had summed up for a wider public the main results of his study of our paintings.[3] Before, however, proceeding on the lines above sketched out to a concise survey of the pictorial remains, it is desirable that we should acquaint ourselves with the main facts at present ascertainable about the time and local *milieu* in which the paintings, etc., were produced; about the purpose they were intended to serve, and about the materials and technique used for them.

Dates of inscribed paintings.

As regards the dates and origin of the pictures we receive exact and relatively ample guidance from the inscriptions which are preserved on a number of them. As M. Petrucci has exhaustively treated these in his chapter on the Donors,[3a] it is easy briefly to note here the essential facts. The inscriptions, which are all in Chinese and of a votive character, show dates ranging from A. D. 864 to 983. The latter date closely approaches the commencement of the eleventh century, at which time we must assume the chapel to have been walled up.[4] But that there may be among the paintings some older ones also seems *a priori* very probable. This is suggested by the analogy of the dates in many of the Chinese manuscripts from the same deposit which reach back centuries earlier.[5] It must be remembered also that among the larger paintings just those which, judging from their superior style and execution, appear to belong to an earlier period have often suffered considerable damage, and in consequence have lost their bottom portions together with the inscriptions which they are likely to have borne.[6]

[1] See below, Appendix *E*; for the publication in the *Mémoires concernant l'Asie orientale*, planned by MM. Petrucci and Chavannes, cf. above, p. 835.

[2] See below, Appendix *E*, IV.

[3] Cf. *Annales du Musée Guimet*, tome xli (Conférences faites au Musée Guimet en 1914), R. Petrucci, *Les peintures bouddhiques de Touen-houang* (*Mission Stein*), pp. 115–40, Figs. 1–11.

[3a] See below, Appendix *E*, II.

[4] Cf. above, pp. 820, 827.

[5] See above, p. 821; below, pp. 917 sq.

[6] See, e.g., Pl. LVI, LVII, LIX, LXIII, LXXI.

Tun-huang restored to T'ang dynasty.

On the whole it seems safe to assume that the great mass of the paintings, etc., recovered belongs to the two centuries immediately preceding the walling-up of the deposit.[7] We have seen above that about A.D. 850 Tun-huang was freed from Tibetan subjection, which had lasted for a century, and returned once more to T'ang allegiance.[8] This reassertion of imperial authority may reasonably be supposed to have rendered the position of this westernmost outpost of China proper more secure, at any rate until the end of the dynasty more than half a century later. Such a period of relative peace is likely to have benefited also the places of worship at the Thousand Buddhas and added to their artistic embellishment.

Tun-huang isolated from Empire.

We know that soon after the downfall of the T'ang Tun-huang and the territory of Kua-chou immediately adjoining it once more became isolated from China, and this time for centuries, by the growing power of the Uigurs and Hsi-hsia to the east and south-east.[9] But even before, during the interval just referred to, the political and trade relations with the regions under effective imperial sway could not have been close; for ever since the loss of the 'Western regions' to the Turks and Tibetans Tun-huang had become a mere outlying oasis of no special consequence to the Chinese Empire. This alone would have sufficed to remove any doubt as to the essentially local origin of the paintings which found their way to the Thousand Buddhas of Tun-huang as pious gifts during the ninth and tenth centuries. But fortunately the paintings themselves also furnish direct evidence on this point in the votive inscriptions recording those who offered them for the spiritual benefit of dead relatives, or to secure health, peace, prosperity, and similar boons.

Local production of paintings.

In a dozen or so of the inscriptions treated by M. Petrucci those who are named as the donors, along with members of their families, are described as officials. That their charges were local is made clear in some cases by the description which is given of them.[10] In half a dozen other cases the same may safely be concluded from the fact that the names borne by the donors prove them to belong to the Chang 張 and Ts'ao 曹 families, which we know from historical records to have given for centuries its chiefs to the semi-independent petty state formed out of Tun-huang and the adjoining territory.[11] Other inscriptions again show us the donors as people of modest position

[7] A parallel of some antiquarian value may be drawn, perhaps, from what a passage of Sung Yün's narrative, also otherwise interesting, tells us of the pilgrim's visit, about A.D. 519, to the Buddhist shrines of Han-mo, east of Khotan (cf. Chavannes, *Voyage de Song Yun*, p. 14; also *Ancient Khotan*, i. pp. 456 sq., for the position of Han-mo). Among the thousands of banners which he saw hung up in them he noted that more than one-half were of the period of the Wei dynasty (commencing from A.D. 386). A great number of the Chinese inscriptions on them recorded dates from A.D. 495–513, while only one of them dated back to the epoch of the Yao Ch'in (A.D. 384–417).

[8] Cf. above, pp. 799, 816 sq.

[9] Cf. Chavannes, *Dix inscriptions*, pp. 12 sq., on the conditions in which the Chinese envoy to Khotan during A.D. 938–42 found these outlying territories, always exposed in the south to the aggressions of Tibetans also. Yet his report clearly brings out the essentially Chinese character of the local population; cf. Rémusat, *Ville de Khotan*, p. 77.

This isolation from the Empire is strikingly illustrated by what M. Petrucci (see Appendix *E*, II) has pointed out about the continued use of a *nien-hao* in a votive inscription of A.D. 910, six years after it had lapsed, and about the ignorance displayed in another inscription of A.D. 947 as to the downfall of the dynasty half a year earlier.

[10] Cf. below, Appendix *E*, II, *Les donateurs*, for the inscriptions on the woodcuts Ch. 00205, 00185 (Pl. CIII), and on the painting 00102 (Pl. LX). The name *Kuei-i*, which in the first two occurs among the donors' titles, appears to have been given to the command of Tun-huang after the restoration of Chinese suzerainty in A.D. 850; cf. Chavannes, *Dix inscriptions*, p. 86, note 1.

[11] Cf. M. Petrucci's abstracts, below, Appendix *E*, II, *Les donateurs*, from the inscriptions of Ch. 00101, 00167 (Pl. LXI); 00185 (Pl. CIII); liv. 006 (Pl. LXIX); lvii. 004 (Pl. LXVI); lvii. 001 (Pl. LXVIII). For the position held by the Chang and Ts'ao families in the Tun-huang region, cf. Chavannes, *Dix inscriptions*, pp. 12 sq., 80; also below, Appendix *A*, v. c, and above, p. 817. A member of the Chang family appears already in the middle of the fourth century A.D. as the practically independent ruler of Liang-chou and the marches westwards; cf. Chavannes, *Ancient Khotan*, i. p. 543, note 4.

The Ts'ao Yüan-chung 曹元忠, whom the woodcut Ch. 00185. a of A.D. 947 mentions as its donor with a long string of titles, may have been identical with one of the chief officials of Tun-huang who in A.D. 938 met the Chinese envoy sent to Khotan; see Rémusat, *Ville de Khotan*, p. 77. Ch. lvii. 004 shows the close inter-relationship of the two

or as monks and nuns, which clearly indicates local production for the paintings presented by them.[12]

Chinese civilization of Tun-huang.

Notwithstanding all the political vicissitudes to which Tun-huang had been exposed ever since T'ang power westwards weakened, and in spite of the great distance separating it from the interior of China, the settled population as a whole must have retained unimpaired its Chinese civilization and language during the period with which we are here concerned. This is conclusively proved by the concordant evidence of the historical notices, scanty as they are; of the great mass of the manuscripts deposited in the walled-up chapel; of the votive records whether on stone or pictures, and of the character of the last named themselves. It should be noted that the donors of the paintings and woodcuts are invariably presented to us as Chinese in dress and features, whether secular or monastic. That some weight may be attached to this evidence of the pictorial representations of the donors is proved by unmistakable indications of realistic portraiture such as meet our eyes, e.g., in the painting Ch. lvii. 001 (Plate LXVIII), where the father is duly shown with his left eye blind, or in the fine figure of the donatrix in Ch. liii. 001 (*Thousand Buddhas*, Plate X; also title-page).

Influences from Turkestān and Tibet.

At the same time it is certain that Tun-huang, owing to its position on what may not inappropriately be called the great cross-roads of innermost Asia, must always have been specially accessible to influences coming both from the side of Turkestān in the west and from Tibet in the south. That the former had a great and in certain respects predominant share in determining the forms which Buddhist iconography presents in the paintings and frescoes of the Thousand Buddhas is obvious. But in the present state of our knowledge it appears very difficult, if not impossible, to make out how much of that impress of Central-Asian Buddhist art made itself felt locally, and how much of it was imported earlier to, and absorbed by, Chinese Buddhism in general. In any case we have ample proof left of local visits of Central-Asian Buddhists from the Tārīm Basin and the adjoining regions to the north and north-east in the numerous manuscripts, found among the hidden deposit, in Sanskrit, Khotanese, Kuchean, and Sogdian, as well as in Uigur.

Tibetan art influence restricted.

Considering that Tun-huang had been for fully a century under Tibetan domination and that the vicinity of Tibetan tribes made itself felt also later,[13] the presence of a certain number of pictures either showing the influence of Tibetan style or bearing Tibetan legends is no cause for surprise.[14] A small but interesting group of painted banners, showing Bodhisattva figures unmistakably Indian in style and treatment, points to art influence of the more distant south, coming probably from Nepāl and communicated through Tibet.[15] Yet, compared either with the prolonged political connexion or the considerable mass of Tibetan manuscripts and block-prints found in the cave deposit, the proportion of such Tibetan or quasi-Tibetan pictorial gifts must appear very limited. The explanation probably is that though monks of Tibetan origin may have been established in numbers at the sacred site or have been frequent visitors (as they still are nowadays), yet those pious donors who offered paintings for the adornment of the shrines were almost exclusively drawn from the local Chinese population or else content to employ local artists.

great families as late as A.D. 983. The historical rôle of the Chang and Ts'ao in the Tun-huang region appears to have escaped M. Petrucci's attention.

I may note here in passing that the appearance of the family name of the T'ang dynasty in the designations of the donors of the fine painting lv. 0023 (*Desert Cathay*, ii. Pl. VIII) of A.D. 864 is no proof of non-local origin. The Ch'ien-fo-tung inscription of A.D. 894 (see above, p. 799; Chavannes, *Dix inscriptions*, pp. 77 sqq.) shows us a member of the imperial family settled at Tun-huang as son-in-law of Chang I-ch'ao, who was its governor and virtual ruler until about A.D. 867.

[12] See Appendix *E*, II, *Les donateurs*, for Ch. xx. 004, 005; liv. 0011; lxi. 008; lxvi. 002, etc.

[13] Cf. above, pp. 816 sq.; Chavannes, *Dix inscriptions*, pp. 12 sq.

[14] Cf. for such pictures below, pp. 862, 865, 891, 894; Petrucci, *Annales du Musée Guimet*, xli. pp. 136 sq.

[15] See as regards this group of 'Nepālese' Bodhisattvas, below, p. 862; also Petrucci, *loc. cit.*, pp. 137 sq.

The time was yet distant when Tibetan style and Lamaistic worship were appreciably to affect the decadent Buddhist art of China.[16]

Absence of Tantric monstrosities.

This very restricted nature of Tibetan influence in the art of Tun-huang is confirmed also by another observation. I mean the gratifying total absence in the paintings and frescoes of the Thousand Buddhas of those Tantric extravagances and monstrous obscenities which are so prevalent in the pictorial representations of the later Lamaistic art of Tibet and the regions it has influenced northward. A few of the 'Tibetan' paintings from Tun-huang show, indeed, the beginning of a tendency towards that violent movement, rhythmic torsion of the bodies, and preference for the demoniac, which are such striking characteristics of the later Tibetan style.[17] But sober Chinese taste and decorum never took kindly to these fantastic aberrations. As M. Foucher very justly remarked in the notes referred to above, 'the Pantheon which the paintings of Tun-huang reveal to us was evidently composed for the benefit of donors reasonable in their tastes and under the direction of monks still heedful of decency'.

Motives of votive offerings.

The votive inscriptions of the pictures which M. Petrucci has discussed in his chapter on the donors adequately inform us about the motives from which they were offered.[18] Among them pious wishes for the spiritual benefit of dead parents and relatives are quite as prominent as prayers for the health and prosperity of the donors and their families. Where we find besides these usual objects of supplication also prayers for peace and security of the territory, it is of interest to note that the donors are officials of rank and almost always connected with the families Chang and Ts'ao, which, as stated before, furnished Tun-huang with its local chiefs for centuries.[19] M. Petrucci has duly drawn attention to the fact that, by the side of the ideas and wishes proper to true Buddhist doctrine or compatible with it, the inscriptions often also express hopes and notions which are peculiar to traditional Chinese thought or Taoist in character.[20] They clearly reflect the beginning of that syncretistic process which has produced the strange medley of popular worship and superstition prevailing in modern China.

Portable Buddhist pictures.

It can scarcely be subject to doubt that the practice of offering pictorial representations of Buddhist divinities and of scenes of Buddhist mythology at places of worship goes back to the very beginning of Mahāyāna Buddhism in India, if not earlier. But in India itself climatic and other adverse causes have not allowed any remains of such pictorial offerings to survive except in the form of wall-paintings at the Ajaṇṭā caves and a few less important sites. That references to portable pictures may be traceable in Indian Buddhist literature, or in records that Chinese pilgrims have left of Buddhist shrines in India, is probable. But I cannot spare time to search for such references nor even to ascertain whether, and where, they may have been treated. In Central Asia, on the other hand, the practice of presenting such pictures at places of Buddhist cult is so abundantly attested by archaeological finds from the region of Khotan to Turfān and beyond that no detailed references are necessary. It may suffice to mention that the painted panels brought to light by me in 1900 from image bases of Dandān-oilik shrines were probably the first Central-Asian finds of this kind the origin and character of which could be properly authenticated, and that Professors Grünwedel and Von Lecoq's excavations at Turfān sites have subsequently yielded remains of paintings on fabrics which in type and subjects closely resemble those recovered in such numbers from the 'Thousand Buddhas' of Tun-huang.[21]

[16] Regarding this growing influence of Tibetan art, which appears to assert itself in China specially from the time of the early Mongol Emperors onwards, cf. *Kokka*, No. 311, p. 235.

[17] Cf. Petrucci, *Annales du Musée Guimet*, xli. p. 137.

[18] See below, Appendix *E*, II, *Les donateurs*.

[19] Cf. M. Petrucci's abstracts, *loc. cit.*, of the inscriptions of Ch. 00101, 00185. a, 00205; lvii. 004.

[20] See Appendix *E*, II (conclusion).

[21] Cf. *Ancient Khotan*, i. pp. 250 sqq.; for the first Turfān discoveries of paintings on silk and linen made in 1902–3 by Professor A. Grünwedel, cf. his *Idikutschari*, pp. 67 sqq.

That all these pictures, whatever their material and whatever the subjects represented, were intended to be displayed in the shrines at which they had been offered is definitely proved by the interesting record of Sung Yün already referred to.[22] When describing his visit in A.D. 519 to a famous Buddhist temple at a site east of Khotan, which I have, as I believe, identified with the pilgrimage place of Ulūgh-ziārat to the north-west of Domoko,[23] the pilgrim tells us that 'the banners (*oriflammes*) and canopies (or hangings) in embroidered silk which are suspended there count by tens of thousands; more than half of them are banners of the empire of the Wei'. We need not consider here the question whether Sung Yün necessarily means here banners brought from China. But what is important to note is his further statement that among the banners bearing Chinese inscriptions there were many with dates corresponding to the years A.D. 495, 501, and 513; 'there was only one banner which, upon examination of its date, proved to be a banner of the epoch of the Yao Ch'in [dynasty, A.D. 384–417].'

Sung-Yün's record of temple banners.

In this record, for which credit is due to the Chinese traveller's antiquarian instinct, we have conclusive proof that it was customary at such Buddhist shrines to preserve votive offerings of pictures, and obviously of embroideries, too, for prolonged periods. That this pious custom also prevailed at Tun-huang is strikingly illustrated by the great collection of paintings, etc., discovered in the walled-up chapel. It has also its exact parallels in the shrines of the West, from classical times to the present, and has always helped to enrich the adornment of temples and churches.[24] That apart from any aesthetic or religious notions the custom was largely prompted also by a quasi-practical motive needs no detailed demonstration for those who are familiar with places of pilgrimage in the East, or with some in the West either. To show respect for the gifts of previous donors was obviously in the interest of the guardians of the shrines, who benefited by the charity of such donors and were, no doubt, anxious to attract others to follow their example.

Conservation of votive offerings.

It is to this interested conservation that we may in all probability have to attribute two curious classes of artistic remains found among the deposit of the cave. I mean, on the one hand, those very numerous fragments of silk paintings, banner tops, etc., which must have become mere torn remnants long before the hidden deposit received them; on the other, the equally great mass of fabric strips of all sorts which also had found their way there, and which undoubtedly had once been placed in different cave-temples as votive offerings of a sort still common everywhere in the East.[25] I shall have occasion to discuss these 'votive rags' in my next chapter. Here it will suffice to mention the striking evidence which the elaborate patchwork pieces and lambrequins made up of such tatters bear to the care that was once bestowed by the local guardians upon the preservation of even the humblest votive gifts.

Fragmentary paintings and 'votive rags'.

[22] Cf. Chavannes, *Voyage de Sung Yun*, p. 14; *Ancient Khotan*, i. p. 456; above, p. 838, note 7.

[23] See *Ancient Khotan*, i. pp. 457, 462 sq.

[24] It may not be out of place to call attention here to the great rôle which, as modern researches have abundantly proved, the use of figured fabrics, painted, woven, or embroidered, and often of a very elaborate type, has played in the adornment of Christian churches since an early period, and particularly during Byzantine times. Many fine specimens of such fabrics dating from the fourth century onwards have been brought to light by recent explorations in Egyptian tombs; cf. Strzygowski, *Orient oder Rom*, pp. 90 sqq., 113 sqq.; Diehl, *Manuel d'art byzantin*, pp. 78 sqq., 247 sqq., where further references will be found.

We shall have occasion, when discussing the ancient fabrics from the Thousand Buddhas, to recur to this parallel, made doubly interesting by the close influence of Sassanian art which can be traced in the textile remains both of early Byzantine and T'ang times; see below, pp. 907 sqq.

To Prof. Strzygowski belongs the special merit of having emphasized the important part which such figured fabrics, owing to their portability and easy transport, must have played in the powerful influence exercised by the art of the Hellenized East upon the Christian West. Is it too bold to conjecture that Buddhist art, as displayed and developed in China proper, may have been specially aided by the same medium of painted fabrics in asserting that reverse influence westwards which becomes more and more clearly traceable in remains of the later Buddhist art of Central Asia? The subject is too big to be taken up here in passing.

[25] See below, pp. 899 sq., and Pl. CVII–CX for illustrations of patchwork of 'votive rags'.

Production of votive paintings.

It can scarcely be doubted that practices which were likely to arise from this use of pictures as votive offerings by pious visitors to the sacred caves must have closely affected the very production and character of the paintings. Only in relatively rare cases where donors of considerable means and, perhaps, of special devout leanings were concerned is it probable that the paintings presented were the result of individual orders given in advance to particular artists. Such an assumption may hold good as regards certain of the large compositions found in the collection which must have involved much artistic labour and corresponding expense, or a few of the smaller pieces which by their superior style and execution prove themselves the work of artists of merit.[26] But we may safely assume that the great mass of the pictures was produced as it were for the market, kept in stock at Tun-huang for intending pilgrims, or perhaps brought also to the Thousand Buddhas for sale on the spot at times of special festivals. If analogies from the West were needed to illustrate this, a visit, e.g., to the picture and sculpture shops round Saint-Sulpice at Paris or to Lourdes at times of great pilgrimages would supply them in plenty and in a form distinctly instructive.

Inscriptions not filled in on paintings.

The extent to which this origin of the paintings is reflected in the character of their execution and in the relatively restricted range and monotony of the subjects is a question of considerable interest, but too large to be examined here. Yet it is easy to trace results of this origin in a curious feature which strikes us at once in a number of paintings. I refer to the unfortunately only too numerous instances where the cartouches painted above or beside figures have not been filled with the names or inscriptions that they were undoubtedly meant to receive.[27] The explanation is not far to seek. The addition of the inscriptions, with due regard to the refinements of Chinese calligraphy, was not the business of the painter. When he worked, as in most cases, not to an individual order but for the market, he naturally left the trouble and cost of this supplementary labour to the unknown future purchaser. The latter, again, was often not likely to trouble about such a minor addition to his gift, especially if he had bethought himself of his pious intention, as human weakness would have it, only immediately before the pilgrimage or at the very time of his visit to the sacred site. What M. Foucher has very truly observed about the blanks which in manuscripts so often take the place of intended miniatures,[28] applies with equal justice, but in the inverse sense, also to the far too many blank cartouches in our Ch'ien-fo-tung paintings. Stranger, perhaps, it is in some cases to find the space also left unfilled which had been provided for the votive inscription of the donor.[29] Perhaps the pious givers felt assured that the divinities they implored could recognize their persons and wishes even without a written prayer.

Section III.—ARRANGEMENT, MATERIALS, AND TECHNIQUE

Taking the collection of pictures as a whole, irrespective of the subjects represented and the materials used, and leaving aside the relatively few which served a special non-votive purpose, such

[26] See, e.g., the fine painting of Vaiśravaṇa's progress, Ch. 0018 (Pl. LXXII); Avalokiteśvara guiding a soul, Ch. lvii. 002 (Pl. LXXI); the fine Avalokiteśvara, Ch. xviii. 003 (*Thousand Buddhas*, Pl. XX), etc.

[27] For examples of such blank cartouches, cf. Pl. LVII, LXII, LXIV, LXVII–LXX, LXXIV–LXXVI, LXXIX–LXXXII, etc. While in the case of the, no doubt, cheaper paintings on linen (see Pl. LXXXVIII, sq.) the omission seems regular and can scarcely surprise us, it is curious to observe a blank also in the fine painting of Vaiśravaṇa's progress, Pl. LXXII, which bears every mark of a true artist's hand.

[28] Cf. Foucher, *L'iconographie bouddhique de l'Inde*, p. 21: 'On sait en effet que toute miniature différée est une miniature perdue. Plus d'une fois sur nos feuilles de palmier, comme sur les parchemins du moyen âge, nous trouvons ainsi la place qu'on leur avait ménagée d'avance condamnée à rester perpétuellement en blanc.'

[29] See Pl. LXVII (Ch. 0021; also *Thousand B.*, Pl. XXV). In the large painting Ch. liii. 001 (*Thousand B.*, Pl. X), the omission of the inscription is all the more remarkable because the donors had taken special care to have their persons commemorated in the predella-like foot portion of the painting. The fine figure of the lady reproduced in the vignette of the title-page of the *Thousand Buddhas* looks like a real portrait, and is certainly by the hand of an artist different from, and superior to, the painter of the rest.

as sketches, pounces, and illustrative drawings, we may distinguish three main classes according to the manner in which it was intended to display them as it necessarily affected shape and arrangement. We find, in the first place, paintings, almost invariably executed on silk or linen and often of great size, which were manifestly meant to be hung up on walls of shrines. Now it must be remembered that in the cave-temples the walls of the cellas, porches, and in most cases of the antechapels, too, were already covered with elaborate frescoes making up schemes of decoration complete in themselves and bound to be spoilt by the hanging of paintings against them, whatever method were used for fixing these. So the idea suggests itself that such paintings, or at least the larger among them, may have been primarily used for the adornment of those spacious timber-built vestibules and verandahs which are now found in front of the larger cave-temples and which, though themselves of recent origin, are likely to have been preceded by similar structures of earlier date.[1] That they were hung in such places or else, perhaps, in the halls and chapels of monastic quarters which must have existed in old times in front of the caves, on the long strip of ground separating them from the river-bed,[2] is made probable also by another fact. It is that, in the dim light which alone penetrates into the cellas of the cave-temples, it would have been almost impossible to make out any of the elaborate small-scale details which abound in most of these paintings intended for hanging, still less to appreciate the often considerable merit of the work.

Paintings for hanging on walls.

Only very few out of this class of paintings were found mounted on paper or cloth as if intended to be kept ordinarily rolled up in Kakemono fashion.[3] The rest appear to have been merely fringed with borders of silk or other fabrics. These borders were usually in plain colours, often purple, but a certain number of them had floral decoration in paint or print.[4] In some cases the borders still retained the loops by which the paintings were suspended.[5] Whatever the reasons may originally have been for not mounting the vast majority of such paintings, it is probable that the different extent of the stretching which the thin painted fabric and the thicker border underwent in the course of prolonged suspension may have increased the damage through tears, etc., suffered by these paintings before their deposit in the walled-up chapel. For the same reason these borders had in many cases to be removed before the paintings could be finally mounted on silk at the British Museum and framed. The paintings intended for hanging upon walls never have, of course, any design or colouring on the back surface, whatever the material. Their total number, including such as are recognizable though fragmentary, amounts to approximately 168, of which 131 are painted on silk, 26 on linen, and 11 on paper. The size in this class of paintings varies greatly, the largest specimen in the collection, Ch. xxxvii. 003, 005,[5a] being without border about 7 feet 3 inches in height and having a width which originally may have been well over 7 feet.

Borders of large paintings.

The second class of paintings is the largest in numbers. It comprises banners which, as the regularly adopted arrangement of their fittings clearly proves, were intended to hang freely from the vaults of cellas and porches or from the ceilings of antechapels, verandahs, etc. The banners proper, narrow rectangles in shape, almost without exception show representations of single divinities,[5b] usually with a valance and a band of small rhomboids at the bottom. Whether painted on silk, as in the great majority of the specimens, or on linen or paper, they invariably are provided, when

Arrangement and material of banners.

[1] See above, p. 793; cf. Fig. 198, and *Desert Cathay*, ii. Figs. 185, 227, for similar verandahs elsewhere.

[2] Cf. Pl. 42; also above, p. 797.

[3] See Ch. 0018 (Pl. LXXII); i. 009 (Pl. LXXIX); xviii. 003 (Pl. LXX); lvii. 002 (Pl. LXXI), 003.

[4] Plain borders are illustrated by the paintings reproduced, e.g., in Pl. LVII, LX, LXI, LXIII, LXV, etc.; for a richly decorated silk border, cf. Pl. LXIV; also Ch. xx. 005.

[5] For borders with loops intact, see, e.g., Pl. LXII (Ch. i. 0012), LXVI, LXVII, LXXXVIII (Ch. xx. 009).

[5a] See for R. portion *Thousand Buddhas*, Pl. IV.

[5b] Instead of a divine figure Ch. 0024 has a design of flying ducks, Ch. 0089 of a Padmāsana. In each case the banner is of coloured silk.

completely preserved, with a triangular top for suspension.[6] Suspended by the apex of this, they would float in the air and, twisted by the breeze, would present either side to the beholder. It is undoubtedly for this reason that we always find in the banners the reverse painted precisely the same as the obverse. What was meant for the obverse can usually be determined by the pose being there the iconographically correct one and by the shading, etc., being properly finished.[7] In the case of the silk banners this procedure was made particularly easy by the transparent texture of the fine silk gauze which appears to have always been used for them. This allowed the design to be clearly visible on the reverse, where consequently it merely required to be reinforced and finished. The use of this fine gauze-like silk for the banners was obviously intentional. It offered the additional great advantage of causing the banners, when hung up in the manner described, to interfere less with the lighting of the interior of the cave-temples than would have been the case otherwise; for the latter, as explained above, received light only through their porches and the antechapels usually found in front of these.[8]

Triangular banner tops.

The triangular banner tops were usually made up of the same material as the banners themselves, this being in many cases painted with a decorative design suitable to the available space, or else left plain.[9] In some instances, however, a piece of embroidery took the place of the painted design.[10] Pieces of decorated woven fabrics were also employed in this fashion.[11] In the same way we find occasionally strips of fine brocade used for the borders which fringed the triangular top and served to carry the weight of the whole arrangement.[12] A single suspension loop was attached to the apex of the border.

Streamers and 'strainers' of banners.

Thin slips of wood or bamboo, fixed along the top and bottom edges of the painted rectangles of the banners proper, served to keep them spread.[13] To the upper one was attached the triangular top. The lower one carried a long strip of silk, linen, or paper, according to the material used in the banner proper, of the same width as the banner, but slit lengthwise into four, three, or two bands.[14] In some cases the bands were painted or stencilled with simple floral patterns in monochrome.[15] The bottom end of these bands, having been folded over a narrow slip of cane, was attached by gluing to a flat piece of painted wood, usually decorated with a floral design, which served as a 'strainer' or weighting-board to check undue contortions in the wind.[16] The same piece of wood could conveniently be used also for folding up the banners in case of transport or deposit, and the actual use which, I found, had been made of it for this purpose, no doubt, helps to account for the excellent condition in which most of the banners thus rolled up had survived. Attached to the ends of the upper stick or the bottom of the triangular banner-top there depended two long streamers, of a plain material similar to that of the banner proper, but of a different colour.[17] These streamers, as

[6] For specimens of silk banners retaining the complete arrangement of triangular top, streamers, etc., cf. Pl. LXXVII, LXXX, LXXXII, LXXXVI. For similar specimens in linen, see Pl. LXXXVIII, LXXXIX.

[7] There are, however, instances where the finished side is (by mistake of the artist?) the reverse; see, e.g., Ch. 0010; xxvi. a. 002. Cf. also below, p. 850, note 22.

[8] Cf. above, p. 793.

[9] See Pl. LXXVII, LXXX, LXXXVIII, LXXXIX for examples of painted banner tops; for plain tops, see LXXVII, LXXXVI, LXXXII. Pl. LXXXI shows later repair of a poor sort.

[10] Cf. Ch. liv. 002, Pl. LXXXVI; also xxvi. 002, Pl. CXI.

[11] Specimens detached from the banners for which they originally had served are seen in Pl. CVI (Ch. 00227), CX (i. 0011, 0020), CXI (009, 00118, 00172, 00181), CXII (00165. a, 00232), CXIII (00304. a).

[12] See Ch. lv. 0034, Pl. LXXX, also Pl. CVI; i. 0020, Pl. CX; liv. 005, Pl. CVI.

[13] For illustrations of this arrangement, see Pl. LXXX, LXXXII, LXXXVI, LXXXVIII, LXXXIX.

[14] Four or three bands were usual; see Pl. LXV, LXXVII, LXXX, LXXXII, LXXXV, LXXXVI, LXXXVIII, LXXXIX. The last shows also a banner with two bands. For a paper banner, Ch. xx. 0013, see Pl. XCIX.

[15] Cf. Ch. 0025, Pl. LXXVII; xvii. 001, Pl. LXXX; xx. 0013, Pl. XCIX.

[16] For specimens of banners retaining such 'strainers', see Pl. LXXX, LXXXII, LXXXV, LXXXVI, LXXXIX. For a number of such weighting-boards found detached, see Ch. 0070. a–q.

[17] See Pl. LXXVII, LXXX, LXXXI, LXXXII, LXXXVI, LXXXIX, XCIX.

Mr. Andrews points out to me, floating free gave animation to the banner without injuring, or interfering with the effect of, the painting.

This well-defined class of banners is represented in the collection by a total of about 230 pieces, including such as are mere fragments. Here the preponderance of silk over linen paintings is not quite so great as in the first class, there being about 179 silk banners against 42 painted on linen. To these must be added 9 banners on paper.

Miscellaneous paintings and drawings.

The third class of pictures which still remains to be briefly dealt with is a very miscellaneous one. It comprises a variety of paintings and drawings of which the common characteristics are mainly that they cannot be properly brought under the two categories previously discussed, and that their material is exclusively paper. Among them we find small paintings and drawings of Buddhist divinities, which probably were intended to serve as votive offerings of a humble sort, either to be deposited at the bases of images or pasted on temple-gates, etc., in accordance with still prevailing practices.[18] A votive purpose may safely be assumed for certain paintings in the form of rolls, recalling the *makimonos* of Japan; one of them, representing scenes from the Buddhist hell, is partly reproduced in Plate XCIII, CIII. Religious character of some kind attaches, also, to most of the drawings of which Plates XCVII–XCIX show specimens,[19] though they may not have been always produced for use as votive offerings. Charms and magic diagrams or *maṇḍalas* proper are numerously represented.[20] Finally, there are illustrations in the form of miniature paintings or drawings which are to be found in a number of Chinese or Tibetan manuscripts, almost all more or less of a devotional nature.[21] Reference may be made here also to the small but interesting group of pounces and rough sketches showing the methods used for preliminary stages of work on the larger votive paintings.[22] The total number of paper pictures gathered into our third class amounts to over a hundred.

Woodcuts.

Altogether apart, as far as technical execution is concerned, stands the series of woodcuts which comprise the earliest known specimens of the art, beginning with the fine frontispiece of the printed Chinese roll dated A.D. 868.[23] With the exception of the banners we find all the previously discussed types of pictures represented among the fifty odd woodcuts of the collection.[24] Small prints of single divine figures, intended, no doubt, for votive deposit and often accompanied by block-printed prayers in Chinese and Tibetan, form the vast majority, larger compositions being met with in a very few instances.[25]

Silk used for paintings.

It only remains here to add some brief remarks regarding the materials which were used for the Tun-huang paintings and the technique employed in them. We have seen already that the materials include silk, linen, and paper. Among them the use of silk greatly preponderates, the proportion between silk, linen, and paper pictures contained in the collection corresponding approximately to 62, 14, and 24 per cent. respectively. In the silk used two kinds can clearly be distinguished. A plain finely woven silk cloth appears to have been used always for those paintings which were intended to be hung up against a wall, and which are comprised in the first class treated above. In the banners the silk is equally strong and fine, but of a distinctly gauze-like texture. The difference is in all probability to be accounted for by the fact already explained that these banners were meant to be suspended free in the air, a position where a transparent material

[18] For illustrations, cf. Pl. XCII (Ch. 00160, 00161; xi. 001–002; lvi. 0027–31); Pl. XCVIII (00156); Pl. XCIX (00154, 00155).

[19] For some of the best drawings of this class, one apparently Taoist, see *Thousand Buddhas*, Pl. XXXII, XXXIII.

[20] See Pl. CII, CIII for specimens.

[21] See Pl. XC showing fine Lokapāla figures from the small illuminated manuscript book Ch. xviii. 002; for other specimens, see also Pl. XCII, XCIV, XCVIII.

[22] For specimens, see Pl. XCIV–XCVI. Cf. below, p. 892.

[23] See Pl. C (Ch. ciii. 0014). Cf. below, p. 893.

[24] Cf. Pl. XCIX–CIII for specimens.

[25] See Pl. C (Ch. 00158; ciii. 0014) and the 'Maṇḍala', xliii. 004, Pl. CII.

Paintings on canvas.

would offer advantages. Of the material I have designated as linen it must suffice to state that it presents the appearance of canvas of various degrees of fineness closely woven, being described by Mr. Andrews as 'resembling artist's unprimed canvas of modern times'. The few specimens of this canvas-like material examined by microscopical analysis have proved to be of flax fibres, but this does not altogether exclude the possibility of this material in other cases being cotton, the use of which at Tun-huang is provable since Han times. Among the papers used for pictures the naked eye and the touch easily distinguish a number of varieties differing in texture, colour, and apparently sizing. But no microscopical analysis has as yet been possible. When this is made in accordance with the methods first successfully applied by Professor J. von Wiesner, and extended also to the well-defined types of paper represented among the many dated Chinese manuscripts from the 'Thousand Buddhas', some help may yet be gained for the chronology of the paper paintings.

Paper of paintings.

Technique of paintings.

A variety of circumstances, among them in the first place the death of that honoured old collaborator Professor Sir Arthur Church, has also prevented so far a proper chemical analysis being made of the sizing used for the silk or canvas and of the colours employed. But as Mr. Binyon has already pointed out,[26] the technique is undoubtedly Chinese. With a single exception the paintings are all in water-colours. We find only one picture executed in tempera on a waxy ground over canvas, the fine painting of the goddess Tārā, Ch. lii. 001,[27] and that is unmistakably Tibetan in style and origin, thus confirming what has just been stated as the rule. In the absence of such detailed results as analytical examination and the systematic study of the paintings would yield, I am glad to be able to reproduce here a note on their technical execution with which Mr. Andrews has kindly furnished me at a time when both my artist collaborator and myself are separated by thousands of miles from the originals.

Mr. Andrews on technical execution of paintings.

'The method employed on all paintings is a thin tempera, the vehicle for the pigment being water with a medium added as a binder. Transparent colour is sparingly used as a glaze over the body colour, chiefly in the case of purple and crimson. The fabric appears to have been first prepared by impregnation with some kind of size or alum that the colour might flow evenly and to prevent the thinner colours spreading unduly.[28]

'After sizing, the design was transferred to the material, either by pouncing through the pricked cartoon,[29] or, in the case of light coloured silk gauze, by merely tracing over the drawing placed beneath.[30] The outlines were then fixed by pencilling in with a small brush and grey pigment, resembling thin Chinese ink in the case of light coloured materials and light body colour when a dark material formed the ground. These were the guiding lines for the application of the masses of body colour, which were next laid in very thinly.

'The pigments were ground to extreme fineness and have therefore great covering power. The white which forms the body of nearly all the colours is of extraordinary efficiency, and in places where it is used in its purity, for example in the white touches of Ch. liii. 002, Pl. LVI, its fine quality is evident. Until it has been subjected to analytical examination the material employed for this white cannot be determined. But its exquisite purity and absence of discoloration after so great a lapse of time make it probable that there is no lead basis, and suggest the use of some fine white stone such as the stalactitic formations still in use for a similar purpose in the East.[31]

'The masses of colour having been evenly laid, slight shadings and tintings were added with much skill and deftness. The pink glow on cheeks, finger-tips, and toes, the accentuation of muscular development, the gradations of lotus petals, etc., show the utmost delicacy of handling, more particularly in the fine paintings on silk. Finally the outlines, usually in black, were

[26] Cf. *Exhibition of Stein Collection*, p. 8.

For a brief résumé of the characteristic features of Chinese technique in painting, cf. Petrucci, *Les peintres chinois*, pp. 7 sqq.

[27] For a successful reproduction of this interesting picture, see *Thousand Buddhas*, Pl. XXXI; cf. also below, p. 865.

[28] The method of preparation here assumed is manifestly the same which M. Petrucci describes as having been used in China for paintings on silk from the eighth century onwards; cf. *Les peintres chinois*, p. 7.

[29] For a specimen of such a pounce, see Ch. 00159, Pl. XCIV.

[30] It is this tracing which accounts for such exact replicas as found, e.g., in Ch. i. 002; xxiv. 001, 002; xlvi. 001; see also Ch. iii. 002, xl. 007, and below, p. 863, note 13.

[31] According to M. Petrucci, *Les peintres chinois*, p. 8, Chinese painters under the T'ang obtained their white by the calcination of oyster shells.

pencilled in with a fine brush in firm, sweeping, and confident lines exhibiting in many of the paintings masterly skill in execution and a thorough knowledge of drawing.

'It seems probable that this final stage of the work was usually executed by a more skilled hand than the earlier parts, because it sometimes happens that the original grey guiding lines have not been closely followed in the finishing outlines, but have been improved. The grey lines are often hesitating and feeble, such as a beginner might make; but the final lines are nearly always virile and positive. The range of palette was wide, including gold. Yet there is scarcely a picture which is not pleasing in its subdued harmony, and many which are exquisite in their balance of glowing tints.'

Treatment undergone by paintings.

Here in conclusion brief reference must be made to evidence furnished by the paintings themselves of the treatment that some of them underwent before their deposit in Wang Tao-shih's cave. Repairs in the paintings on silk, often roughly executed, show plainly the damage to which they were exposed while still used for the decoration of cave-temples.[32] There are instances also where the work had left the painter's hand unfinished, perhaps because the purchaser was in haste to make his votive offering.[33] In other cases it looks as if an unscrupulous votary, or some priest wishing for appearance's sake to patch up a tattered picture, had added at its bottom another piece showing, indeed, figures of donors, but certainly not the original ones.[34] Finally we have evidence that silks, the colours on which might have faded or otherwise been destroyed, were used for fresh paintings palimpsest fashion, or that fragments of older paintings were adapted for use with other compositions.[35]

Section IV.—SCENES FROM THE LEGENDARY LIFE OF GAUTAMA BUDDHA

Arrangement of scenes in banners.

The first group of paintings to be described in accordance with the above classification comprises exclusively scenes taken from the legendary Life of Gautama Buddha or closely connected with it. The group is not merely of special iconographic and artistic interest, but also particularly well defined in its range of subjects and style as well as in its external features. As regards the latter we may note at once that all the twenty-six paintings, more or less complete, comprised in the group are narrow silk banners.[1] The largest of these, Ch. xxvii. 001 (Plate LXXVII), measures a little over 25″ in length,[2] and none of the rest are likely to have much exceeded this length, leaving accessories out of count. In width there is also much uniformity, the range varying only from $6\frac{3}{8}$″ to $7\frac{3}{4}$″. As a necessary result of the narrow shape of the banners, we always find in them a succession of scenes arranged one above the other.[3] Probably owing to the proportion between the usual length and width of the banners, and from regard for the space demanded by each composition, the number of scenes represented in each banner appears ordinarily to have been four. The banners which are complete as regards length or nearly so always show this number, and for the great majority of the others the same may be assumed with much probability.[4] But there is evidence of exceptions.[5]

[32] See, e.g., Ch. 0022; xxvi. a. 003, 005; lv. 0020; lxi. 001.

[33] See, e.g., Ch. lv. 009, 0010.

[34] Cf. Ch. xx. 003; lxi. 0010.

[35] See, e.g., Ch. 0017, 0098, 00105, 00157, 00461; xxi. 0013.

[1] They are Ch. 0030, 0039, 0071, 00114, 00471; xx. 008; xxii. 008, 0035; xxv. 001; xxvi. a. 003, 004; xxvii. 001; xlvi. 004, 005, 007; xlix. 005, 006; lv. 009–12, 0016, 0021, 0022; lvi. 0032; lxi. 002; and fragments 0019, 00518.

[2] Excluding the triangular top, here cut from the same piece of silk. Other 'complete' banners, Ch. 0030; xx. 008; lv. 009, 0010, 0012 measure 22″ to 24″.

[3] This vertical arrangement of scenes from the Life of Gautama Buddha is quite common in Indian sculpture, too; for Gandhāra examples see, e.g., Foucher, *L'art du Gandhâra*, i. Figs. 74, 181, 225, 237, 238, etc.; for a later specimen from Sārnāth, *ib.* Fig. 209.

[4] See Ch. 0030 (Pl. LXXVI), 00114 (Pl. LXXIV); xx. 008 (*Thousand B.*, Pl. XIII); lv. 009–0010 (Pl. LXXIV), 0021. In Ch. lv. 0012 we find four cartouches for inscriptions provided, though one of the corresponding 'scenes' is only a landscape. In the companion picture Ch. lv. 0011 (*Desert Cathay*, Pl. VI) the composition divides itself into four parts though there are only two actual scenes. Ch. xxvii. 001 (Pl. LXXVII) conforms to the general rule if we count the kneeling pair of deer below the second scene as a symbolic representation of the 'First Sermon' at Benares (see below, p. 859). The fragments of Ch. 0071 (*Thousand B.*, Pl. XII) also belong to four scenes. In the pair Ch. xlvi. 004, 005 and xlvi. 007 (Pl. LXXV) we have also four scenes, though not all are complete.

[5] Thus in Ch. xlix. 005 there are only two scenes, and the probable length would have sufficed for only one more.

Division of scenes; cartouches.

The divisions between the successive scenes or groups of objects are indicated either by transverse borders—we have examples of both decorative and plain ones—or else by suitably introduced features of landscapes which mark the shifting scene.[6] Cartouches, usually in yellow, light buff, or similar colour, are always to be found accompanying the scenes, being placed mostly along one or another of the vertical borders.[7] But unfortunately only in very few cases have the pious donors incurred the trouble and expense of having them filled in with the intended explanatory legends.[8] No doubt, most of the scenes would explain themselves to contemporary pious eyes quite as well as they do to ours; but for others we greatly miss the help of inscriptions. In almost all banners the vertical edges were provided with painted borders, showing often elaborate floral ornament or else plain.[9]

Chinese style of scenes.

The same clear definition of type which this group of paintings displays as regards range of subjects and external arrangement is reflected also by their style. 'The most important point to note', as M. Foucher has justly put it, 'is the frankly Chinese fashion in which these traditional subjects have been treated. Under the hand of the local artists they have undergone the same disguising transformation which Christian legend has under those of the Italian or Flemish painters.' The same observation applies, as we shall have occasion fully to explain further on, to those scenes from Śākyamuni's life or his previous births, the Jātaka stories, which are represented so often on marginal bands of the big paintings showing Amitābha's Paradise and so on.[10] Everything connected with the physical types of the actors, their costumes and movements, the setting of the scenes, whether architecture or landscape, appears here 'translated bodily into Chinese', to use Mr. Binyon's graphic expression.[11] All this contrasts strikingly with the fact that the figures of Buddhas and Bodhisattvas, as presented to us in banners and large paintings alike, conform more or less closely in physical appearance and dress to the types as originally evolved by Indian tradition and transmitted through Central-Asian Buddhist art.[11a]

Explanations of Chinese style.

The problem thus raised is very interesting from various points of view and was bound to attract attention from the first. But the explanations proposed differ. M. Petrucci has assumed that 'while the foreign tradition easily maintained and imposed itself in respect of the extra-mundane, as soon as it was a question of representing the real life of the saviour, the Chinese *milieu* demanded images evoking this reality. Upon the legend which came from the West, China imposed its own conception.'[12] On the other hand, in Mr. Binyon's view 'a solution may be suggested in the probability that the prototypes of these scenes were painted in China at a time when only an oral

In Ch. xxvi. a. 004 (Pl. LXXV) the 'Seven Ratnas' are arranged in five successive panels, seven cartouches being duly allotted.

[6] For decorative borders with floral patterns, see Ch. xlix. 006, lv. 0016 (*Thousand B.*, Pl. XII); also xxv. 001; xlvi. 004, 005; lv. 0021, 0022. Plain coloured borders are used in Ch. lv. 009, 0010. Low undulating hill ranges are introduced to divide scenes in Ch. 0039; xx. 008 (*Thousand B.*, Pl. XIII); xxii. 008 (Pl. LXXVI); xxvi. a. 003, 004 (Pl. LXXV); xxvii. 001 (Pl. LXXVII); other landscape features in Ch. lv. 0012 (Pl. LXXV). Architectural lines are cleverly turned to the same purpose in Ch. 0030 (Pl. LXXVI); xlvi. 007 (Pl. LXXV); xlix. 005.

[7] Cf. for specimens Pl. LXXIV–LXXVII; *Thousand B.*, Pl. XII, XIII.

[8] See Ch. xlvi. 004, 005; xlix. 006 (*Thousand B.*, Pl. XII); lv. 0010 (Pl. LXXIV), 0016 (*Thousand B.*, Pl. XII).

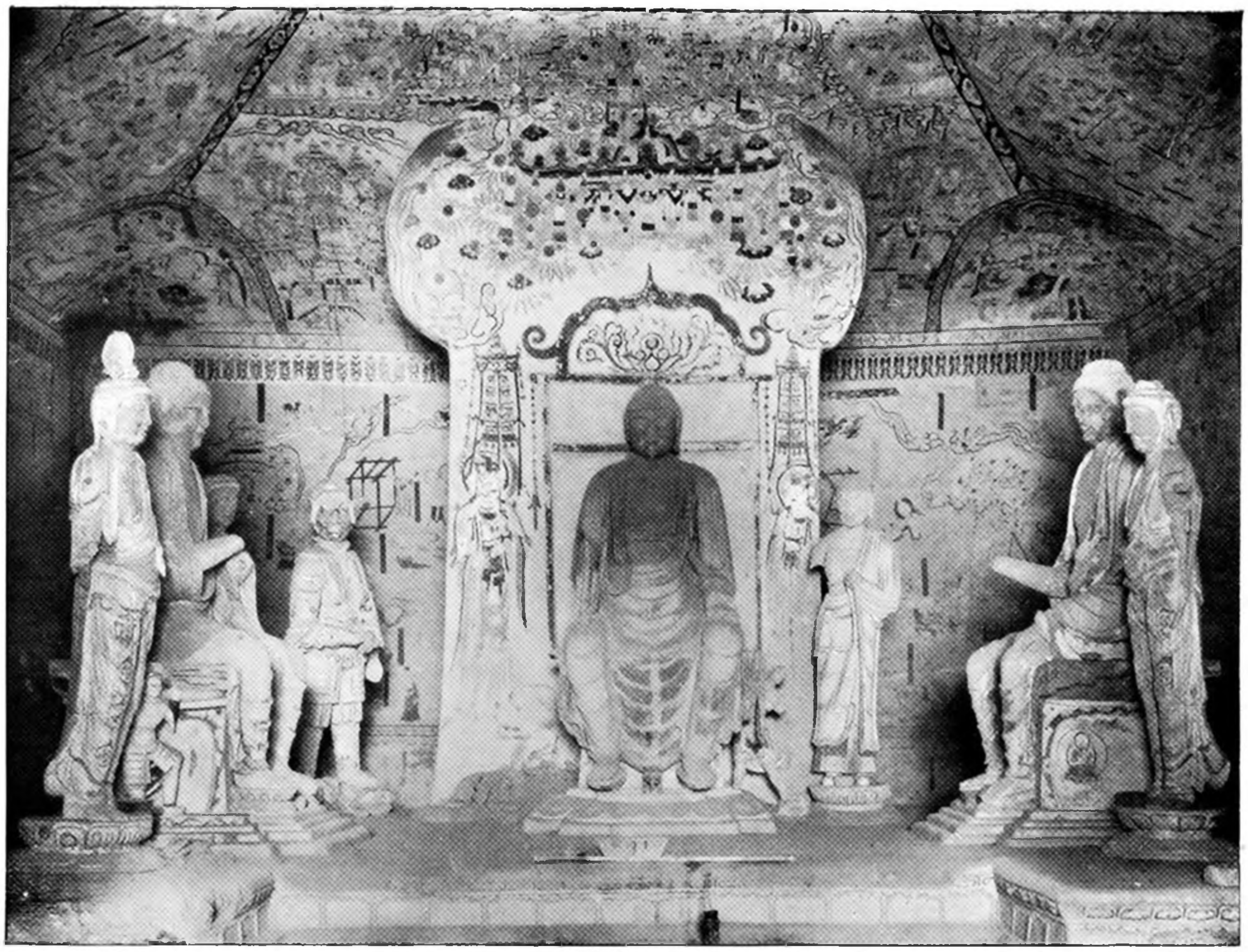
[9] Cf. for decorated vertical borders Ch. xlix. 006; lv. 0016 in *Thousand B.*, Pl. XII; lv. 0012 in Pl. LXXV; for examples of plain borders see Pl. LXXIV–LXXVII. The border in Ch. lv. 0021, 0022 is curious as it appears intended to reproduce elaborately turned wooden balusters of the type found at shrines of Khādalik, Lou-lan, Mīrān; see above, pp. 165, 396, 404, 539. Does this supply a hint as to a position in which such banners may originally have often been displayed?

[10] Cf. below, p. 886.

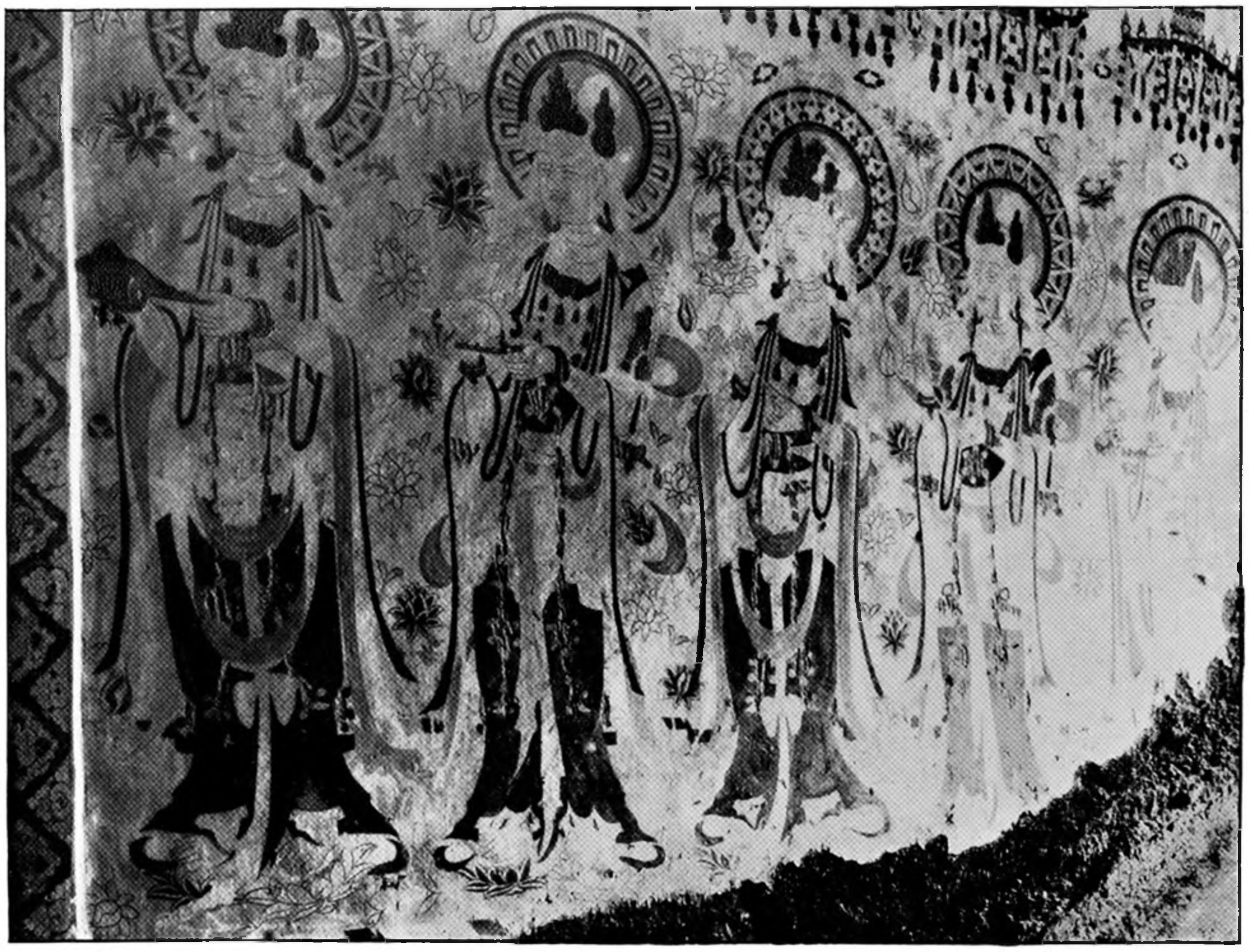
[11] See *Exhibition of Stein Collection*, p. 9.

[11a] Here attention may also be called to the fact that the very interesting representation of a painting on silk or some other fabric with a series of scenes illustrating Śākyamuni's life story, which one of the figures in a fine fresco of Kizil (Grünwedel, *Altbuddh. Kultstätten*, p. 187, Fig. 384) exhibits, shows a style distinctly older and closer to the Indian prototype than the rest of the wall-paintings in that cave.

[12] Cf. Petrucci, *Conférences au Musée Guimet*, xli. p. 124; also *Gazette des Beaux-Arts*, septembre 1911, pp. 207 sqq.

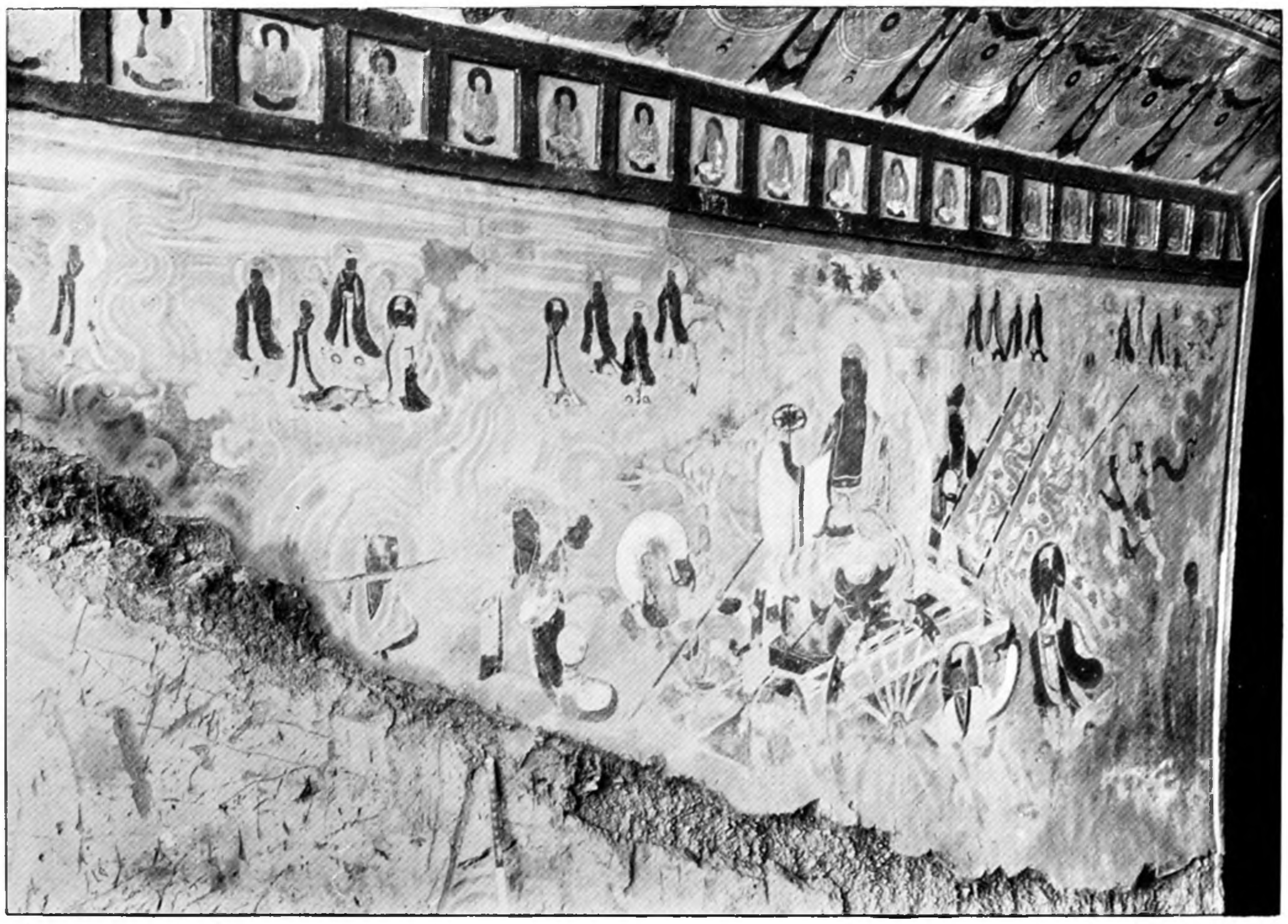


213. INTERIOR OF CELLA IN CAVE CH. VII, CH'IEN-FO-TUNG, SHOWING PLATFORM WITH STUCCO IMAGES AND PAINTINGS ON WEST WALL AND CEILING.



214. TEMPERA PAINTING SHOWING PROCESSION OF OVER-LIFE-SIZE BODHISATTVAS ON NORTH WALL OF PORCH IN CAVE VII, CH'IEN-FO-TUNG.

P. 848



215. TEMPERA PAINTING ON SOUTH WALL OF PORCH OF CAVE VIII, CH'IEN-FO-TUNG, SHOWING BUDDHA ON CAR, MOVING THROUGH THE AIR ESCORTED BY PLANETARY DIVINITIES, ETC.

216. LOWER PORTION OF PAINTED PANEL ii AND DADO SHOWING PROCESSION OF DONATRICES AND ATTENDING LADIES ON E. WALL OF CELLA IN CAVE CH. VIII, CH'IEN-FO-TUNG.

tradition of Buddhism had reached the empire, before Indian imagery had become familiar and before the Mahāyāna had been developed. In the first preaching of the religion in China the person of Śākyamuni must have held a much more important position than in later doctrine. Perhaps, therefore, in these same scenes we may recognize the survival of a very ancient pictorial tradition, fixed by its first practitioners.'[13]

Life scenes in Yün-kang relievos.

The present state of our knowledge in general concerning the early iconography of Chinese Buddhism and the special limitations of my own would not justify my expressing a definite opinion on this important question. But there are certain observations of an archaeological nature which appear to me to have a direct bearing on the problem. In the first place, it is necessary to call special attention to the evidence furnished by a remarkable series of bas-reliefs representing scenes of Gautama Buddha's Life to be found in one of the Buddhist rock-cut shrines at Yün-kang, a site of northern Shan-hsi, the abundant sculptural remains of which have been first rendered accessible to research by a magnificent publication of M. Chavannes.[14] Executed about the middle of the fifth century A.D., these sculptures represent the earliest monuments so far known of Buddhist art in China. That numerous features in them attest the influence exercised by Gandhāra sculpture has been duly pointed out by MM. Chavannes and Petrucci, and may be considered as certain.[15] Traces of this Graeco-Buddhist influence are unmistakable in the eleven relievo panels, just referred to, of the second Yün-kang grotto which illustrate episodes of the legendary Life of Gautama Buddha.[16] Yet by the side of them we meet there also with clear signs of a transformation which figures and costumes had undergone in what appears to me a distinctly Chinese sense.[17] In illustration of this I may refer in particular to the presentation of Prince Siddhārtha and some less sacred personages in the scenes of the 'Four Encounters'.[18]

These very scenes indicate another important point of contact between our pictorial representa-

[13] See *Exhibition of Stein Collection*, pp. 9 sq.

[14] See Chavannes, *Mission archéologique dans la Chine septentrionale*, 1909, Planches, 1, Pl. CVII–CXII.

[15] Cf. Chavannes, *Mission archéologique*, i. pp. 294 sqq.; also *T'oung-pao*, 1908, p. 642, quoted by Petrucci, *Revue de l'Université de Bruxelles*, 1910, pp. 497 sq.

[16] See Chavannes, *Mission archéologique*, Planches, 1, Nos. 204–14; i. pp. 300 sqq. For iconographic features which the Yün-kang sculptures in general undoubtedly derived from corresponding representations among Gandhāra relievos, cf. Petrucci, *Revue de l'Université de Bruxelles*, 1910, pp. 499 sqq. To these might be added such architectural details as the roof of the royal palace (Nos. 205, 207, 208–10), which recalls the cut pediment surmounted by a trefoil arch so frequent in Gandhāra relievos (cf. Foucher, *L'art du Gandhâra*, i. p. 138), the domed portion in the Yün-kang representation being dwarfed and the side volutes disproportionately developed; the acanthus frieze shown below the roof, a very common motif in Gandhāra (cf. Foucher, *ib.* i. p. 240, Figs. 96, 99, 115, 211, etc.); the shape of the ceiling shown over interiors, with half-bust figures rising on either side (Nos. 206, 211; cf. Foucher, *ib.*, Figs. 76, 77); the classical rosettes used for filling spaces (Chavannes, Nos. 207, 214) just as in the frescoes of Mīrān (see above, p. 524).

Perhaps it may not be too bold to recognize a western motif also in the fine vine-leaf tracery which decorates the upper frieze framing the Yün-kang relievos (see Chavannes, Nos. 204, 205, 208–12; cf. Foucher, *L'art du Gandhâra*, i. p. 222, Figs. 127, 174).

[17] The evidence of this transformation has been touched upon in its main outlines by M. Petrucci, *Gazette des Beaux-Arts*, 1911, vi. pp. 207 sq.

[18] Thus the high conical head-dress worn by the Prince as well as by some attendant figures in the panels Nos. 207–10 looks just as typically Chinese as the black cap which he shares in some of our banners with a number of other actors in the scenes (see e.g. Ch. 0030, Pl. LXXVI). It is noteworthy that the same conical head-dress appears also in our banners on the heads of ministers or courtiers (see e.g. lv. 0011, *Desert Cathay*, Pl. VI; Ch. xlix. 006; lv. 0016, *Thousand B.*, Pl. XII) as well as of Chandaka, Ch. xlvi. 007, Pl. LXXV.

Its very close resemblance to the high caps worn by the donor figures in certain Lung-mên sculptures of the seventh century (see Chavannes, *loc. cit.*, Nos. 292–6) and seen already in the British Museum painting of Ku K'ai-chih (fourth century) is significant, leaving no doubt as to its Chinese character.

In the same way the saddle-cloth on the Prince's horse in the Yün-kang relievos (Chavannes, *ib.*, Nos. 207–10, 212) is as distinctly Chinese as that seen wherever horses appear in our banners (see e.g. Ch. xlvi. 007 and lv. 0012 in Pl. LXXV; lxi. 002, Pl. LXXVI; lv. 0016, *Thousand B.*, Pl. XII). The difference from the Gandhāra fashion is made quite clear by comparing, e.g., Foucher, *loc. cit.*, i. Fig. 182, or above, Fig. 134, for an example from the Mīrān frescoes.

Scenes of 'Four Encounters' at Yün-kang.

tions of the legendary Life of Śākyamuni and the series of Yün-kang relievos. Of the 'Four Encounters' which precede the Bodhisattva's decision to renounce the world, and which are so familiar to Buddhist tradition, the many hundreds of Gandhāra relievos so far found have failed to furnish a single illustration.[19] Yet at Yün-kang we find them all represented in successive panels, while our banners actually reproduce three of them and are likely to have contained them all.[20] This fact, when compared with the apparently total neglect of these scenes in the old Buddhist art of India as a whole, not merely of Gandhāra,[21] must have its significance and may yet help to throw light on the different influences which left their mark on the Ch'ien-fo-tung paintings. But here we touch upon questions which it remains for others and for future discoveries to clear up.

Hieratic tradition in divine figures.

A second observation calling for notice here is that the 'translation' into Chinese forms characterizing the banners under discussion does not extend to those divine figures which stand outside as it were of what might be called the real life-story of the historical Gautama preceding his attainment of Buddhahood. For them the forms and garments, as fixed by hieratic tradition derived from Gandhāra art, are preserved with the same respect as is shown in all their other representations among our paintings.[22] This point is clearly brought out by the figures of Dīpankara Buddha and his divine attendants in Ch. lv. 009 (Plate LXXIV); the Buddha in Ch. xlix. 006 (*Portf.* Plate XII); the manifestations of a Buddha receiving worship in the as yet unidentified scenes of Ch. lv. 0022. The figures of the unborn Bodhisattva with his attendants seen in Māyā's dream (Ch. lv. 009, Plate LXXIV) and of the Bodhisattva practising austerities (Ch. xxvii. 001, Plate LXXVII) may well be classed as coming under the same head. The distinction thus regularly maintained by the painter in one and the same banner seems certainly to favour the assumption that the Chinese 'translation' of the quasi-secular figures was mainly prompted by the Chinese conception of things real.

Archaic costume of secular figures.

A third observation to be noted offers a direct antiquarian interest. It concerns the character of the Chinese dress in which all lay actors of these scenes, including Gautama himself before his 'Bodhi', are presented. This dress can obviously not be meant to represent contemporary Chinese fashion; for both head-gear and robes markedly differ from those seen in the costumes which the figures of donors and donatrices exhibit in so many of our other paintings.[23] We are thus led to conclude that the Chinese dress reproduced in the scenes from Gautama's

[19] Cf. Foucher, *L'art du Gandhâra*, i. pp. 348 sq.

[20] See Chavannes, *loc. cit.*, Nos. 207–10; i. p. 307. Among our banners we find the first three encounters with the old man, the sick man, and the corpse, illustrated in a single panel of Ch. lv. 009 (Pl. LXXIV), and the first and second by Ch. lv. 0016 (*Thousand B.*, Pl. XII). The latter banner is incomplete and may, from the size of the extant portion and that of its pendant, Ch. xlix. 006, well be assumed to have originally contained all four encounters.

[21] See Foucher, *loc. cit.* It deserves to be noted, however, that certain of the 'Four Encounters' are represented among the sculptures of Boro-budur and in late Nepalese pictures.

[22] It can scarcely be urged as an argument against the strength of this attachment to hieratic tradition that in two banners, Ch. 0071; xlix. 006 (both in *Thousand B.*, Pl. XII), we find the Buddha's *left* hand raised and his *left* shoulder covered by the under-robe, against the fixed iconographic pose. In the case of banners both sides of the silk gauze had to be painted (see above, p. 844). We have here obviously cases of a mistake made by the artist as to which side was to be treated as the one intended for contemplation and properly finished.

[23] In order to realize the difference it will suffice to compare the head-gear and coats worn by ministers and other male figures respectively in the banners reproduced in Pl. LXXIV–LXXVI, also Plates XII, XIII of *Thousand B.*, with those of the male donors seen in Pl. LX, LXI, LXII, LXVI, LXVII, LXVIII, etc. In the case of ladies the difference is particularly striking in respect of the coiffure, as illustrated by the same plates, that of the donatrices being invariably of a far more elaborate type. Differences appear also in details of the robes and jackets which are easily made out in comparing, e.g., the ladies' dresses in Pl. LXXIV with those of the donatrices in Pl. LXI, LXII, LXVI, etc. For details see the descriptive entries in the List below.

The following is a list of all paintings bearing dates and showing donors, arranged in chronological order: A.D. 864, Ch. lv. 0023; A.D. 891, XX. 005; A.D. 897, liv. 007; A.D. 910, liv. 006; A.D. 922, 00167; A.D. 939, 00224; A.D. 952, xlvi. 008; A.D. 955, 00184; A.D. 957, xlvi. 0013; A.D. 963, xxi. 001, lviii. 003; A.D. 983, lvii. 004. For reproductions see Pl. LXI, LXVI, LXVII, LXIX, LXXI. For the chronological evidence, furnished by peculiarities of dress, cf. also below, p. 885.

secular life is quasi-archaic and belongs to times preceding the later T'ang period in which the earliest of our dated pictures were painted.

Early head-dress in pictures.

This conclusion is considerably strengthened by the fact that, on the other hand, we can trace a distinct similarity between the costumes seen in our banner scenes and those in sculptural or pictorial representations of earlier origin. We have already called attention to the close resemblance which the high conical head-dress worn by Ministers and other personages of consequence in our banners bears to that seen in the Lung-mên relievos representing the court dignitaries of a Wei king and executed about the middle of the seventh century.[24] The same applies to their robes. It is equally interesting to note that in the big embroidery picture, Ch. 00260, Plate CIV, the donors are represented with head-gear which is identical with that seen on the majority of the men in the scenes from Gautama's Life story. The hair-dresses of the donatrices also agree closely with those worn by many of the ladies in these scenes. That this fine embroidery picture is older than most of the paintings in our collection from the 'Thousand Buddhas' seems to me clearly indicated by a variety of concordant observations.[25] This is plainly the case also in respect of the fine silk paintings, Ch. xlvii. 001 and Ch. liii. 001, where the earlier head-dresses just referred to are to be found again on the figures of donors and their ladies.[26]

Archaeological indications from objects.

Finally, brief mention may be made of certain archaeological indications which a comparison of objects represented in the setting of the banner scenes with actually surviving relics furnishes. M. Petrucci has already pointed out that the buildings which figure as the locale of so many of the scenes show in all details the architectural style which in Japan is known as the Nara style and associated with the new capital Nara founded by the Emperor Shomu (A.D. 724–48).[27] To M. Petrucci, too, belongs the credit of having pointed out that the musical instruments seen in the scenes of 'Prince Siddhārtha's life in the seraglio' and the 'Sleep of the women' are of just the same shape as those found in the great treasure collection which the pious Emperor Shomu bequeathed to the Shōsōin temple of Nara, and which has been preserved to this day as 'a unique domestic museum'.[28] In this connexion I may direct attention also to the decorative motifs evidently derived from Gandhāra art which the palace wall and door jambs exhibit in Ch. xlvi. 007 (Plate LXXV). The massive ring-handle represented on the same palace door is carried by a monster's head which curiously recalls on the one hand the corresponding door-ornament seen in a Han relievo, and on the other the grotesque appliqué masks going back to a 'Gorgoneion' type which appear so frequently on terracotta vases, etc., of Yōtkan.[29]

[24] See above, p. 849, note 18; Chavannes, *Mission archéol.*, Planches, I, Nos. 292–5; i. pp. 329, 561; Petrucci, *Gazette des Beaux-Arts*, 1911, vi. p. 212. M. Petrucci justly emphasizes the close relationship in costume, attitude, and pose which links the delineation of these Lung-mên figures with the earlier art of Ku K'ai-chih.

As regards the head-dress of the court ladies in the Lung-mên relievos (see Chavannes, *loc. cit.*, No. 296), it is curious to observe that it seems to represent a transition stage nearer to the elaborate coiffure of the donatrix figures in most of our paintings than to the relatively simple and more graceful one exhibited by the ladies in the banner scenes.

[25] See below, pp. 895 sq. and Descriptive List, under Ch. 00260.

I may note that the similarity is very close also as regards the costumes; cf. for that of the men, e.g., the top scene of Ch. xxvii. 001, Pl. LXXVII. The group of donatrices is shown also in *Thousand B.*, Pl. XXXV.

[26] For colour reproductions of Ch. liii. 001 and of the fine figure of the donatrix, see *Thousand B.*, Pl. X and vignette. Certain peculiarities of treatment, such as the use of 'high lights', give to this painting and the closely related picture of Amitābha's Paradise, Ch. xlvii. 001 (see *Thousand B.*, Pl. XI), a position apart. Regarding the date of these paintings cf. also below, p. 885.

[27] See Petrucci, *Gazette des Beaux-Arts*, 1911, vi. p. 208. For illustrations of buildings, see Pl. LXXIV–LXXVI; *Thousand B.*, Pl. XII, XIII.

[28] Cf. Petrucci, *ibid.*; Ch. xlix. 005; lv. 0011 (*Desert Cathay*, ii. Pl. VI). It is certain that the famous storehouse of the Shōsōin (cf. Fenollosa, *Epochs of Chinese and Japanese Art*, i. pp. 110 sqq.), to which we shall have occasion to refer repeatedly below in connexion with our decorated fabrics, contains many other objects also analogous to those represented in our paintings.

[29] Cf. Chavannes, *Mission archéol.*, Planches, I, No. 170;

Chinese landscapes in banners.

Purely Chinese in conception and design are the landscapes which appear in the background of numerous scenes of our banners, and are among their artistically most pleasing features. The consummate skill with which the impressions of great distance, 'plein air', variety of mountain forms, and the like are conveyed within the very limited space, and the delicate and truthful presentation of colour effects due to atmospheric factors, betoken an art nurtured by great models and a long and still living tradition. To do due justice in this respect to the art merit of banners, such as Ch. lv. 0010–12, lxi. 002, reproductions on a larger scale would be needed than it has been possible to provide.[30]

Diversity of composition and treatment.

While the style in all the banners with scenes from Gautama Buddha's Life is frankly Chinese throughout, we also observe in them a striking diversity of composition and treatment. The idea naturally suggests itself that this diversity may have been caused, or at least facilitated, by that relative freedom from hieratic convention which the 'translation' of those legendary scenes into Chinese garb, whatever its origin, implied. To observe those variations is all the more easy for us because these banners range themselves on closer examination into a series of small groups exhibiting unmistakably common characteristics. This again is obviously connected with the fact that more than one banner was needed for a representation if it were only of the most popular or important scenes in Śākyamuni's secular life-story. Since only a small portion of this could possibly be illustrated in a single banner, the custom would necessarily arise of having these scenes painted in small groups or at least in pairs of banners.

Groups of banners.

The largest of such groups to be found in our collection comprises the five banners Ch. 0039, 00471; xx. 008; xxii. 008, 0025. That they belong to one series is proved not merely by the general uniformity of style but by identity of size, details of arrangement, etc.[31] As the reproductions of two among them show, their style is distinguished by a certain rude vigour of drawing which attains distinct charm in the rendering of animal figures.[32] Their limited range and restraint of colouring is shared by another group comprising the three banners Ch. xxvi. a. 003, 004 (Plate LXXV); xxvii. 001 (Plate LXXVII), though here the drawing is not equally strong and true.[33] Another group of three banners, Ch. xxv. 001; lv. 0021, 0022, shows poor and perfunctory drawing, but presents the special interest of containing only scenes which so far have not been identified. The three paintings Ch. 00114; xlvi. 007; lxi. 002 have in common expressive if not always delicate drawing, besides harmony in rich colouring and truth in representing vivid movement.[34]

Pairs of banners.

Among pairs of banners that formed by Ch. lv. 009, 0010, both reproduced in colour, Plate LXXIV, is foremost in artistic merit and fortunately is also excellently preserved. The drawing is remarkable for its fine yet vigorous pen-strokes, the colours strong and clear. The landscapes of

above, p. 98 with specimens in Pl. III, IV; *Ancient Khotan*, i. pp. 207, 218 (Pl. XLIV, XLV). The reproduction of the door-handle in Pl. LXXV is too small to show any details of the ornament which is evidently meant to be of bronze or other metal. For an apparently similar grotesque head in a Turfān fresco, cf. Grünwedel, *Altbuddh. Kultstätten*, p. 310.

[30] See Pls. LXXV, LXXVI. Of the deftness of line and colour Ch. 0071 in Pl. XII of *Thousand Buddhas* will convey a better idea.

[31] For a brief summary of these common characteristics, cf. Descriptive List, Ch. 0039.

[32] See Ch. xxii. 008, Pl. LXXVI, and Ch. xx. 008, *Thousand B.*, Pl. XIII.

[33] The low undulating hill ranges which serve to divide scenes and the recurrence of identical sprays or flowers to fill empty spaces are characteristic of this group.

I may note here in passing that the way in which banners belonging to particular groups have turned up from bundles bearing proximate numbers proves the utility of the care taken in preserving the original 'site-marks', given by me to the bundles successively brought to light. It also shows that the original contents of the bundles are not likely to have been mixed up altogether by Wang Tao-shih.

[34] See Ch. 00114, Pl. LXXIV, with its harmonious colours and clever presentation of clouds and Nāgas; xlvi. 007, Pl. LXXV; lxi. 002, Pl. LXXVI. Comparison of the last with the same scene of the mounted messengers searching for Prince Siddhārtha in Ch. 0071, *Thousand B.*, Pl. XII, clearly shows the use of a common model in composition. In all three an identical flower device is used to fill in empty spaces.

the background show much skill in conveying a sense of great width and distance. In the pair Ch. xlix. 006; lv. 0016 the workmanship is equally delicate and the colouring very pleasing; but the banners have suffered more damage.[35] The third pair, Ch. lv. 0011, 0012, though not as fine in colours, is remarkable for life-like and expressive drawing of figures, and once again demonstrates a high degree of artistic feeling in the landscapes.[36] The two banners Ch. xlvi. 004, 005 are specimens of poor composition and hasty design, but claim at least the merit of having their cartouches duly filled with inscriptions which explain the badly-drawn scenes. Concluding this rapid survey, we may note that it leaves us with only a few banners for which companion pieces are wanting. Among them Ch. 0071 may be specially named here for the very careful colouring of the figures, well set-off by the harmoniously blended quiet tints of the landscape.[37]

Subjects represented in scenes.

After these remarks on the style and grouping of the banners we may proceed to review the subjects represented in their scenes. No attempt can be made here systematically to discuss the iconography of these subjects with reference to other graphic and plastic representations of the same, whether known to us from India, Central Asia, or the Far East. Still less does it come within my scope to compare their iconography with the descriptions which texts belonging to various periods and branches of Buddhist literature furnish of the corresponding incidents in Śākyamuni's life-story. All that can be aimed at is a classification of the scenes and some record of general observations bearing upon their presentation and character.

Order of scenes.

In the first place attention may be called to the fact that, just as in the case of the corresponding plastic representations of the Gandhāra relievos, it is usual for our banners to display the different scenes, whatever their choice may be, in chronological order.[38] That this order usually descends from the top towards the bottom is a natural consequence of the shape of the banners and the manner in which they were suspended. But we have evidence that this rule was not strictly observed in all cases.[39] It is probable that the chronological sequence was ordinarily followed also where a group of banners was meant to illustrate a longer series of scenes.[40] But, of course, there is nothing definitely to indicate whether an arrangement of such banners from right to left or left to right was intended.[41]

Scenes from Gautama's secular life prevail.

When we come to analyse the range of the scenes represented in our banners we meet with an interesting fact at the outset. In a rough total of seventy-three panels, complete or partly preserved, on these banners, among them ten with scenes as yet unidentified, there are only four to be found the subjects of which fall outside the limits as it were of Gautama Buddha's secular life, as marked by the Conception on the one side and the Attainment of Bodhi on the other. The exceptions are the

[35] Reproduced in colour, *Thousand B.*, Pl. XII.

[36] For Ch. lv. 0012, see Pl. LXXV; for Ch. lv. 0011, *Desert Cathay*, ii. Pl. VI.

[37] For Ch. 0071, see *Thousand B.*, Pl. XII; for Ch. 0030, below, Pl. LXXVI.

Ch. xlix. 005, of inferior workmanship, may possibly have belonged to the same group as Ch. xxvi. a. 003, 004; xxvii. 001 (see the representation of soldiers in scale armour; also the flower device in seraglio scene). But the *indicia* are not quite certain.

[38] Cf. Foucher, *L'art du Gandhâra*, i. pp. 267 sq.

[39] For undoubted exceptions, see Ch. lv. 009, Pl. LXXIV, where the panel representing three out of the 'Four Encounters' is inserted between the scenes of the Dīpaṅkara Jātaka and Māyā's Dream, and Ch. xxvii. 001, Pl. LXXVII, where the Announcement of the Illumination appears above the Austerities and the Bath in the Nairañjanā. Here the order is clearly determined by artistic considerations. For possible exceptions Ch. xlvi. 004 and xlix. 006, *Thousand B.*, Pl. XII may be compared. The Gandhāra relievo with vertically arranged scenes, *L'art du Gandhâra*, i. p. 268, fig. 74, furnishes a corresponding instance.

[40] Such a regular sequence is certainly observed in the groups Ch. 0039 > xxii. 008 > 0035 > xx. 008; xxvi. a. 004 > xxvi. a. 003 > xxvii. 001; lv. 009 > lv. 0010; lv. 0011 > lv. 0012. In other groups there may be slight deviations.

[41] The analogy of the vertical lines of Chinese characters in our old documents and manuscripts would suggest the order from right to left as the usual one. But, no doubt, the place of exhibition had a determinant influence, as was certainly the case with the horizontally ranged relievo panels in Gandhāra sanctuaries (cf. Foucher, *L'art du Gandhâra*, i. p. 268) and those of Yün-kang (cf. Chavannes, *Mission archéologique*, Planches, I, Nos. 204–14; i. p. 305).

Dīpaṅkara Jātaka scene in Ch. lv. 009 (Plate LXXIV); the Announcement of the Illumination and the 'First Sermon' in Ch. xxvii. 001 (Plate LXXVII), if the two deer there shown may be accepted as a sufficient symbolic representation of the latter; and the seated Buddha represented in Ch. xlix. 006.[42] If we compare this overwhelming preponderance of scenes from Gautama's Nativity and his preparation for *saṃbodhi* with the proportion which this class of scenes bears in Gandhāra sculpture to that taken from his subsequent story as the Enlightened One, the contrast cannot fail to be striking.[43] It seems difficult to refrain from concluding that the scenes depicting incidents from the personal life-story of S'ākyamuni made a stronger appeal to his local Chinese worshippers' instinct for the real than those illustrating the attainment and propagation of his doctrine.

Scenes not represented in Gandhāra relievos.

It is of special interest also to observe that, by the side of many scenes well known to us from the relievos of Gandhāra, we find a number of other incidents illustrated which, though familiar to the traditional story as presented by Buddhist texts, have so far not been found represented among the remains of Gandhāra sculpture. A careful synopsis of the scenes identified and detailed below shows that, by the side of sixteen shared in common with the plastic art of Gandhāra, our banners illustrate seventeen more of which no sculptural representations have up to the present been met with among the remains of Graeco-Buddhist art.[44] The number of reproductions, which might furnish some guidance as to the relative popularity of the scenes, also approximates very closely, being 30 and 33 respectively.[45]

It would scarcely be profitable to speculate upon the reasons which may account for this relative frequency of scenes unknown to the extant Gandhāra relievos, unless the question were examined in the light which Chinese Buddhist literature as well as early representations in India, apart from Gandhāra, and in Java, Indo-China, and elsewhere in the Far East, might help to throw upon it. For me it must suffice to call attention to two points. One is that the pictorial art of Gandhāra, which might have made a comparison more complete and instructive, is wholly lost to us, at least for the present. The other is that the extensive choice of subjects independent of Gandhāra models is in full agreement with what we have already observed as regards the wholly Chinese treatment of the scenes, whatever their iconographic derivation. Some special points of contact with Gandhāra in the representation of details, as well as some distinct points of divergence, can conveniently be noticed in the review of the various scenes represented to which we may now proceed. For this the biographical order of the episodes, as applied by M. Foucher in his classical work, recommends itself as the most appropriate.

Dīpaṅkara Jātaka and Māyā's dream.

The group of scenes taken from the Jātakas or anterior births of the Master is a relatively restricted one among the relievos of Gandhāra. In our banners too it is represented only by a single scene, the one which suitably occupies the top panel of Ch. lv. 009 (Plate LXXIV). It shows us the future Bodhisattva paying homage to Dīpaṅkara Buddha and receiving from him the

[42] To these may have possibly to be added from among unidentified scenes the two of Ch. lv. 0022 and a third in xlvi. 005, where a Buddha figure enthroned on a lotus appears.

[43] The number of scenes from Gautama's Life, previous and subsequent to *saṃbodhi*, which M. Foucher has occasion to discuss, is about equal; cf. *L'art du Gandhâra*, i. pp. 291–408 and pp. 408–594. The number of actual reproductions extant of scenes of the second class is probably considerably larger.

[44] The following scenes known from Gandhāra relievos are represented also on our banners, the figures in brackets showing the number of reproductions: The Dīpaṅkara Jātaka (1); Māyā's Dream (3); Gautama's Birth (2); the Bath of the Bodhisattva (2); the Seven Steps (3); the Simultaneous Births (1); the Writing Competition (1); the Wrestling Competition (1); the Casting out of the Elephant (1); the Archery Contest (2); the Prince in the Seraglio (1); the Flight from the Palace (4); Farewell to Kaṇṭhaka and Chandaka (4); the Cutting of the Hair (1); the Austerities (2); the First Sermon (1 ?).

[45] Among the scenes not found in Gandhāra relievos the banners show us frequent reproductions of the following: the Four Encounters (3); the Messengers' Search for Gautama (5). None of the ten unidentified scenes seems to be repeated.

prophecy of his own greatness in the future. The episode was a favourite one with the sculptors of Gandhāra, who, however, staged it in a far more elaborate fashion.[46] Next we meet with three representations of the Bodhisattva's Miraculous Descent or Conception as revealed to Māyā in her dream.[47] The scene is familiar to early Indian as well as to Graeco-Buddhist sculpture. In the latter Māyā is always shown as reclining on her left side, a pose suited to the sacred tradition which made the future Buddha enter her right hip just as he was also to see the light from it.[48] In two of our banners, on the contrary, Māyā is seen resting on her right side.[48a] This departure is of particular interest because the earliest representations of the scene at Barhut and Sānchi, as well as that at Boro-budur, support it.[49] May we recognize here a point of contact with Indian Buddhist sculpture preceding Gandhāra art, and can this apparently unorthodox pose be due merely to inadvertence, as has been assumed? It is noteworthy also that in our representations of the scene the white elephant carrying the Infant Bodhisattva appears on a cloud and is thus clearly marked as a vision. This is in complete harmony with the original tradition of the texts, which present the descent of the white elephant not as a real event but as a mere dream of Māyā.[50]

Scenes preceding Gautama's Birth.

Immediately below this scene in Ch. lv. 009 we find painted another, which seems rightly described by Miss Lorimer as Queen Māyā's return to her father's palace. It has no *pendant* in Gandhāra sculpture as far as we know it, and I am at present unable to trace any references to this episode in the texts.[50a] The same remark applies also to the top scene in the companion banner Ch. lv. 0010 (Plate LXXIV), which shows us Māyā asleep in the same pavilion and pose as seen in the 'Descent' scene, but with three figures kneeling outside to the left on a cloud and in the attitude of adoration. They are dressed in the usual Chinese costume of these scenes and are without haloes. The interpretation is uncertain; but some connexion might suggest itself with the Interpretation of the Dream which would suitably find its place here. This incident is familiar to the Gandhāra relievos,[51] but has no representation otherwise in the banners. The scene succeeding the above in Ch. lv. 0010 is again one that is absent in Gandhāra but quite clear in its character. It presents to us Māyā on her way to the Lumbinī garden. She is being carried in a palanquin by four bearers whose rapid movement is excellently expressed.[52]

Gautama's Birth, Seven Steps, and Bath.

Immediately below in Ch. lv. 0010 we see the miraculous Birth of Gautama Bodhisattva, represented also in Ch. 0039, and a familiar subject in Buddhist art of all times and regions.[53] The child's issue from the mother's right flank and her pose grasping a bough are in close conformity with tradition. But instead of gods receiving the sacred babe, as Indian tradition demanded, we find Māyā assisted only by her ladies. In this, as also in the ingeniously delicate way in which her wide-hanging sleeve is used to screen the act of birth, we may well recognize features due to Chinese sense of propriety. The same banner Ch. lv. 0010 (Plate LXXIV) completes its 'Nativity' series by showing in its lowest panel the Seven Steps of the Infant Bodhisattva, with the lotuses springing up beneath, a very spirited and well-drawn composition. We find the same scene twice again, in Ch. 00114 (Plate LXXIV); xxii. 0035, but in each case preceded by the Bath of the Infant. The placing of the Seven Steps immediately after the Birth is in agreement with the regular practice of the Gandhāra sculptors.[54] But the literary tradition oscillates between this and the interposition

[46] Cf. Foucher, *L'art du Gandhâra*, i. pp. 273 sqq., Figs. 139, 140.

[47] See Ch. 0019, 0039 (a fragmentary banner of inferior execution); lv. 009 (Pl. LXXIV).

[48] See Foucher, *L'art du Gandhâra*, i. p. 293; Figs. 149, 160 a.

[48a] In Ch. 0019 the pose is doubtful, as the obverse cannot be determined.

[49] Cf. Foucher, *loc. cit.*, p. 293, note 1.

[50] Cf. Foucher, *loc. cit.*, p. 292.

[50a] [For a textual reference, see *Add. & Corr.*]

[51] See *ibid.*, i. pp. 296 sqq.

[52] The subject is found treated by Javanese artists at Boro-budur; cf. Foucher, *loc. cit.*, i. p. 312, note 1.

[53] Cf. Foucher, *L'art du Gandhâra*, i. pp. 300 sqq.

[54] See *ibid.*, i. pp. 305 sqq., Fig. 154.

of the Bath, and this uncertainty of tradition may well account for the varying sequence just noted in the banners. The two representations in Plate LXXIV agree in making only women witness the miracle. But in Ch. xxii. 0035 a male figure joins Māyā and her sister Prajāpatī. As regards the scene of the Bath, it is of special interest to observe that the painters of Ch. 00114 (Plate LXXIV); xxii. 0035 follow, of two traditionally well-known versions, the one which makes Nāgas, or divinities of the thunder-clouds, i. e. 'Dragons' in Chinese eyes, perform the laving of the New-born, whereas the Gandhāra school chose the more rational version of two gods pouring out the water from jars.[55]

The Simultaneous Births.

Before we proceed further it will be appropriate, in accordance with M. Foucher's example, to mention the banner, Ch. xxii. 008 (Plate LXXVI), where we find represented some of the births which miraculously coincided with that of the Bodhisattva. They naturally attach themselves to the cycle of scenes of his Nativity. The banner imperfectly preserved shows us out of the traditional seven *sahajāta* only three: a lamb, a calf, and a foal together with their mothers, all drawn with considerable skill. There can be no doubt that the foal is meant for the Bodhisattva's future steed Kaṇṭhaka, which, as we shall presently see, is such a favourite figure in the scenes depicted on our banners. We meet with Kaṇṭhaka as one of the *sahajāta* also in Gandhāra sculpture.[56]

The Seven Jewels.

Though outside the series of legendary scenes, three representations of the Seven Jewels, or *sapta ratnāni*, in Ch. 00114 (Plate LXXIV), Ch. xxvi. a. 004 (Plate LXXV), and the fragment Ch. 00471, may also find convenient mention here. According to the texts these Seven Jewels appertain to every Cakravartin, or Universal Monarch, from his birth, and there is good reason to believe that the Predestined One was credited with this character and its attributes by tradition from an early date.[57] Five among these 'Jewels', the future wife (Yaśodharā), minister, and general, as well as the future horse and elephant, are obviously counted among the *sahajāta*, and in Ch. 00114 we see them represented in the form and dress characteristic of them where they figure in the scenes. It is of some importance to note that representations of the Seven Jewels, though known otherwise to ancient Indian sculpture, have not been found so far in Gandhāra relievos.

Scenes of Gautama's childhood and youth.

Scenes showing incidents of the childhood and youth of Prince Siddhārtha are rather frequent in the banners, and one of the latter, Ch. 0030 (Plate LXXVI), is entirely devoted to them. If we deal before these with the scene portrayed in Ch. xlix. 006 (*Thousand B.*, Plate XII), it is because we find here the Bodhisattva depicted as a child, together with an inscription in the cartouche clearly showing that at this early age he is discoursing on his anterior births to various officers. Is it possible that the scene of a Gandhāra relievo, otherwise not well defined, which shows the young Prince discoursing apparently to his parents' household,[58] has to be interpreted in the same way? Turning to Ch. 0030, we find there represented a series of incidents from Siddhārtha's youthful training which are well known to Gandhāra sculpture, with their order closely conforming to that which the tradition preserved in Indian texts indicates. In the top panel, accordingly, we see the famous episode of the Writing Competition, making an appropriate pendant to the 'Manifestation at School' frequently presented in Gandhāra relievos.[59] Next below follow physical exercises depicted in the form of a wrestling competition and a weight-lifting contest. In the bottom scene we see the youthful Prince in the act of casting out the elephant treacherously killed by his cousin

[55] See Foucher, *ibid.*, i. pp. 308 sqq., Figs. 156 sq. With the tripod on which the Bodhisattva stands in the Gandhāra relievos may be compared the golden laver seen in Ch. 00114. In Ch. xxii. 0035 this appears again raised on a lotus pedestal.

This perhaps might be meant as a compromise with the literary tradition which represents the Bodhisattva as standing on a lotus; cf. Foucher, *loc. cit.*, i. p. 308.

[56] See Foucher, *loc. cit.*, i. p. 317, Fig. 163.

[57] Cf. Foucher, *ibid.*, i. p. 317.

[58] See Foucher, *loc. cit.*, i. pp. 320 sq., Fig. 164 b.

[59] Cf. Foucher, *ibid.*, i. pp. 322 sqq., Figs. 165–67. In the painted panel the scholars have the manifest appearance of boys, which agrees well with the scene taken up by the Gandhāra sculptors.

Devadatta.[60] The position of this last scene suggests that Chinese pictorial convention did not necessarily connect the physical contests with the betrothal of the Prince, as apparently was customary in the school of Gandhāra.[61] With the latter event, however, is undoubtedly linked the scene of the archery contest in Ch. xlix. 006; lvi. 0032. Though only fragmentary, it is made safely recognizable by the row of drums representing the target.[62] This brings us direct to the Prince's marriage. Its sole representation among our paintings is provided by a panel of Ch. xlix. 005, which shows us Siddhārtha in the seraglio with Yaśodharā, attended by women dancing and playing music. It should be noted that the scene is treated with the same regard for decorum as in its Gandhāra counterpart.[63]

No scene of First Meditation.

We have now approached that period in Gautama's life which is to see the Bodhisattva transformed into the Buddha. Tradition knows of two external occasions which make the Prince realize his religious vocation. One is the First Meditation induced by a visit to his royal father's country estates; the other is furnished by the 'Four Encounters', which bring before his eyes the three evils of earthly life, old age, illness, and death, and the means to escape them. Whereas Gandhāra art has illustrated more than once the First Meditation with its incidents, it appears to have completely neglected the Four Encounters, inviting as they were for plastic representation.[64] In our paintings we find this exactly reversed, and the same is the case, too, as we have already observed, in the relievo cycle of Yün-kang.[65] The fact is certainly noteworthy and apt to strengthen the impression that the iconographic inspiration of the legendary scenes in the banners was not originally derived from the art of Gandhāra.

Scenes of Four Encounters.

We find the first three 'Encounters' condensed as it were into one scene in Ch. lv. 009 (Plate LXXIV). It shows us with much realism the old man being led, the sick man on his bedstead, and the putrefied corpse. From the last there rises a cloud carrying a small kneeling figure, which evidently is meant for the departing spirit. The figure is turned towards a palace-like structure raised on clouds in the distant background which represents an abode of the Blessed. That the figure of the Bodhisattva is absent from the scene may seem strange. But the omission of the monk's figure is perhaps less surprising. In the original legend he symbolizes the way of salvation, and that for Chinese eyes seems appropriately replaced by the vision of a heavenly abode promising continuance of mundane happiness. Our large paintings show us how completely the hope of Sukhāvatī, Amitābha's paradise, has effaced all desire of Nirvāṇa in the minds of the pious of Tun-huang. In lv. 0016 (*Thousand B.*, Plate XII) the encounters with the old man and the sick are vividly brought before us in separate scenes. The delicately painted banner is badly broken, but may well have comprised four panels in its complete state, if we judge from the size of the remaining part.

Prince's Flight from the Palace.

The 'Sleep of the Women' is a scene which tradition brings into closest connexion with the Bodhisattva's resolve of Renunciation and his immediately following 'Flight from the Palace'. Just as Gandhāra sculptors usually place the two scenes side by side,[66] we find them combined in

[60] See Foucher, *ibid.*, i. pp. 330 sqq., Fig. 169.

[61] Cf. the careful observations of M. Foucher, *L'art du Gandhâra*, i. pp. 326 sq., on the difficulty, due to varying tradition, of distinguishing between scenes of physical exercises and of sporting contests preceding the Prince's marriage.

[62] See for the corresponding Gandhāra scene represented in a single relievo, Foucher, *ibid.*, i. pp. 332 sq., Fig. 170. The bad preservation of the scene in Ch. xlix. 006; lvi. 0032 is particularly regrettable, because it makes it impossible to compare details with the relievo representation at Yün-kang; see Chavannes, *Mission archéol.*, Planches, I, No. 204.

[63] See Foucher, *loc. cit.*, i. pp. 337 sq., Fig. 178 a; for the same scene at Yün-Kang, following immediately after the Archery Contest, see Chavannes, *Mission archéol.*, Planches, I No. 205.

[64] Cf. Foucher, *L'art du Gandhâra*, i. pp. 340 sqq., 348 sq.

[65] See above, pp. 849 sq.

[66] Cf. Foucher, *loc. cit.*, i. pp. 351 sqq., Figs. 180, 181.

the top portion of Ch. lv. 0011 [66a] and in the fine fragment Ch. 00518. In both the Bodhisattva, mounted on Kaṇṭhaka (and in the complete scene accompanied by Chandaka),[67] is seen escaping on a cloud, while below in the palace court lie four women, musicians, and dancers, in attitudes of deep sleep. In Ch. xlvi. 007 (Plate LXXV), where the flight of the Prince is represented in a similar fashion, the place of the women is taken by sleeping guards at the palace gate, who are also seen below in Ch. lv. 0011. Ch. xlix. 005, a banner of inferior composition and technique, shows the Flight from the walled palace enclosure immediately below the 'Life in the Seraglio'. In the last-named banner, as well as in Ch. 00518, xlvi. 007; the feet of the horse are lifted up by small kneeling figures, in which we recognize the Yakṣas of the texts and Gandhāra relievos.[68]

Farewell to Kaṇṭhaka; the Hair-cutting.

The episodes shown by the banners as following the Prince's Flight fall necessarily into two distinct series. One comprises those which concern the Bodhisattva's person and companions; in the other we find certain incidents which take place at the palace of his father Śuddhodhana and in connexion with the search made by his order for the fugitive. It will be convenient to notice the personal episodes first, especially because they alone are known also from Gandhāra sculpture. Among these episodes the Farewell to Kaṇṭhaka and Chandaka stands first in chronological order, and evidently also appealed with special force to the sentiment of the pious; for we find it represented not less than four times in our banners.[69] They show us the Bodhisattva still in his princely robes with his hair elaborately dressed. Before him in Ch. lv. 0012 (Plate LXXV); lxi. 002 is seen Kaṇṭhaka kneeling, in exactly the same touching pose which the corresponding Gandhāra relievos display.[70] Below the Farewell to Kaṇṭhaka Ch. lv. 0012 (Plate LXXV) shows us the scene of the Hair-cutting well known to tradition, both in the texts and in the sculptures, but not so far met with in Gandhāra.[71] The form in which the incident is here presented, with two divine attendants about to perform the act of hair-cutting, is peculiar to the Chinese version of the legend. The final episode of the cycle of *abhiniṣkramaṇa*, or the Flight, is Kaṇṭhaka's Return to the Palace, and this we find represented by the bottom scene of Ch. xxvi. a. 003, where, however, differently from the Gandhāra treatment, Chandaka's figure is absent.[72]

Search for fugitive Prince.

Of the second series of incidents connected with the Flight and referred to above it must be noted at once that, while it appears to be wanting among the known remains of Gandhāra sculpture,[73] it is on the contrary abundantly represented in eleven panels of our banners. Twice we see the women and the guards of the princely seraglio, whose sleep had made the Bodhisattva's unnoticed departure possible, brought before King Śuddhodhana for examination and judgement.[74] A larger number of scenes serves to illustrate the Search for the Prince, which according to the

Also at Yün-kang the 'Sleep of the Women' directly precedes the 'Flight of the Bodhisattva'; see Chavannes, *Mission archéol.*, Planches, I, Nos. 211, 212.

[66a] See *Desert Cathay*, ii. Pl. VI.

[67] As in Ch. lv. 0011; xlvi. 007, the Prince's horse is shown at a rapid gallop, the painter discreetly contents himself with indicating Chandaka's presence only by his head rising above or before Kaṇṭhaka's.

[68] See Foucher, *loc. cit.*, i. pp. 357 sqq., Figs. 182, 183, 184, etc. Four divine figures supporting Kaṇṭhaka's hooves are seen also in the Yün-kang representation of the Flight; see Chavannes, *Mission archéol.*, Planches, I, No. 212.

[69] See Ch. 0071; xxvi. a. 003; lv. 0012 (Pl. LXXV); lxi. 002. In the last named the farewell to Kaṇṭhaka is represented above, and that to Chandaka below as if it were a separate scene. I regret that no reproduction could be provided for this well-painted and relatively well-preserved part of a banner. The scenes in the other two banners are mere fragments; see Ch. 0071, *Thousand B.*, Pl. XII.

[70] Cf. Foucher, *loc. cit.*, i. pp. 362 sq., Figs. 184 b, 185. The sculptors of Yün-kang, too, knew this pose and reproduced it faithfully; see Chavannes, *Mission archéol.*, Planches, I, No. 220; i. p. 304, with note; also Petrucci, *Revue de l'Université de Bruxelles*, 1910, p. 503.

[71] Cf. Foucher, *loc. cit.*, i. pp. 330 sqq. It is, however, highly probable that the small stone-carving obtained by me at Khotan (see *Ancient Khotan*, i. pp. 209, 220; ii. Pl. XLVIII, Kh. 003. g), which shows the Bodhisattva in the act of cutting off his long hair with his sword, was actually produced in the Gandhāra region.

[72] Cf. Foucher, *ibid.*, i. pp. 367 sq.

[73] For a possible illustration of the *kumārānveṣaṇa*, see Foucher, *loc. cit.*, i. p. 374, note 1.

[74] See Ch. xlvi. 007 (Pl. LXXV); lv. 0011 (*Desert Cathay*,

tradition of the texts the King institutes, as soon as his departure is discovered, with a view to persuading him to return and forgo renunciation of the world. In the top scene of Ch. xx. 008 (*Thousand B.*, Plate XIII); xxvi. a. 003 we assist at the dispatch of the mounted messengers by the King. In Ch. xlvi. 004 the inscription attached to the third panel explains that the scene represents the King being told of the dispatch of the five 'Ministers', as the royal emissaries are styled there. The same appear to be meant by 'the five Ministers' to whom the panel immediately above shows 'the Prince preaching the Law'. The scene of the royal messengers' actual search seems to have been a particularly favourite theme; for we meet with it in not less than five banners.[75] Finally, the banners Ch. xx. 008 (*Thousand B.*, Plate XIII) and xlvi. 007 (Plate LXXV) make us assist at the scene of the messengers reporting to the King the futility of their quest.

Scenes after Gautama's 'Bodhi'.

I have already had occasion to point out how few are the scenes which show us Gautama Buddha after his Enlightenment. Those illustrating events directly leading up to the attainment of Bodhi are equally scarce. The six years of Austerities are symbolized by Ch. xxvii. 001 (Plate LXXVII) and lv. 0012 (Plate LXXV), which show us the emaciated figure of the Bodhisattva in the traditional pose of Indian ascetics, as exhibited also by the corresponding relievo representations of Gandhāra.[76] Next we see in the bottom panel of the former banner the Bodhisattva taking his bath in the river Nairañjanā before proceeding to the place of his approaching final Illumination—a traditionally well-known scene but not hitherto met with in Gandhāra. The great scene of the Illumination itself, so dear to Indian Buddhist thought throughout all phases, and soon symbolized in the *bhūmisparśa-mudrā* of the Enlightened One, is absent from our banners. But, as if to compensate us for the blank left by the chief spiritual event, the top scene of Ch. xxvii. 001 (Plate LXXVII) reflects it as it were by a vivid and effective presentation of the miraculous Announcement of the Illumination. There, too, the Master's Five Disciples are cleverly introduced. The absence of chronological arrangement in this banner, already noted above,[77] removes any doubt that the pair of deer or antelopes which are shown below the ascetic figure of the Bodhisattva are intended to symbolize the First Sermon in the Deer Park of Benares.[78] On the other hand, we find no trace in the banners of the symbols of the Wheel (*dharma-cakra*), the trident, or Triśūla, and their combination (*vardhamāṇa*) serving as symbols of the First Sermon, as they did in the ancient sculpture of India including that of Gandhāra.[79]

Rebirth of souls.

In conclusion it seems convenient to make brief reference here to two silk banners which, if they have no connexion whatever with the legendary life of the Buddha, yet represent a scene of a religious character and could not be more suitably treated elsewhere. They depict what M. Foucher first rightly recognized as the Rebirth of souls in a Buddhist paradise. The banner xl. 001 is too badly preserved for the determination of all details. But the composition undoubtedly agrees with that of Ch. lv. 0015 (Plate LXXXIII). This shows a lotus plant rising from an expanse of water meant for Lake Sukhāvatī and bearing at alternate curves five lotus

ii. Pl. VI). For a doubt about the king's (?) figure on horseback, see Descriptive List, Ch. xlvi. 007.

[75] See Ch. 0071 (*Thousand B.*, Pl. XII); xxvi. a. 003; xlvi. 007 (Pl. LXXV); xlvi. 004 (here the ministers search on foot); lxi. 002 (Pl. LXXVI). A comparison of the last with the first of the above scenes points to a common prototype and one of considerable artistic merit.

[76] Cf. Foucher, *L'art du Gandhâra*, i. pp. 379 sqq., Figs. 192, 193.

[77] See above, p. 853, note 39.

[78] Cf. Foucher, *loc. cit.*, i. pp. 432 sqq., Figs. 217, 220. Whether the bottom scene in Ch. 0071 (*Thousand B.*, Pl. XII) is also meant for the First Sermon remains, in the absence of any distinguishing mark or *lakṣaṇa*, quite uncertain.

[79] For a conjecturally suggested representation of the *triratna* or 'Three Jewels', see the remarks on the as yet unidentified scene of Ch. lv. 0021 in Descriptive List.

Here may be conveniently mentioned also three unidentified scenes, Ch. xlvi. 005; lv. 0022, in which appears the figure of a Buddha on a lotus seat and within a vesica. That Gautama Buddha is meant in the first banner is clear from the Chinese inscription which describes him as being worshipped by the King and Queen. But the incident remains obscure.

flowers, on each of which is seated a Bodhisattva figure. On the uppermost newly opened lotus is seen dancing a new-born infant. That this represents the soul in its happy rebirth, so eagerly prayed for in the votive inscriptions of the pious, is not subject to doubt.[80] Its association with the lotus, the symbol of the mounting soul, is both felicitous and artistically expressed here.

Section V.—BUDDHAS AND BODHISATTVAS

Indian type of Buddha figures preserved.

Among the paintings of a specifically 'iconographic' character and consecrated to single divine figures the first place may be suitably allotted to those representing Buddhas. That the number of such pictures is relatively small offers no occasion for surprise; for we know that Mahāyāna worship has in all periods and countries tended to turn its attention elsewhere. On the other hand, it is of interest to note that in these representations of Buddhas the type of physical appearance, pose, and dress, as fixed originally by Indian hieratic convention, is throughout preserved with more care and uniformity than in the case of any other class of divinities represented among our paintings. The same observation, I may add, applies also to the wall-paintings of the 'Thousand Buddhas' Caves'. It seems as though local piety, whether Central-Asian or Chinese, if attracted far more by other and humanly nearer divinities, had treated with special conservative respect the supreme figures of Buddhist faith. The subject is too large to be more than touched here. But attention may be drawn at least to the drapery, which almost always reproduces the type fixed by the fashion prevailing among Gandhāra representations of the Buddha.[1]

Representation of different Buddhas.

The uniformity of the pose, which is mostly that of the *vitarka-mudrā*,[2] makes it still more difficult than it would be otherwise to determine which particular Buddha is intended. For Ch. 00101, however, an inscription gives us the name of Bhaiṣajya-buddha, while Gautama Buddha and his 'Dhyāni-buddha' Amitābha suggest themselves for the figures meant in Ch. i. 001 and Ch. xxiv. 005 (Plate LXXXIII) respectively. Ch. xlvi. 009 is of interest as showing a Buddha (Maitreya ?) seated in European fashion, with small moustache and some hair on the chin. Among the paper pictures of Buddhas, which are somewhat more numerous and apparently often either taken from the beginning or end of manuscripts or intended for pasting up as votive deposits,[3] I may specially mention the series Ch. 00191–202, which shows seated Buddhas with different *mudrās* of the hand and with short Chinese inscriptions evidently explaining the latter. The small Buddha figures which are frequently met with painted on triangular head-pieces of banners[4] may, in view of the position they occupy relative to the Bodhisattvas represented below them in the picture proper, be assumed with some probability to be meant for Dhyāni-buddhas.

Leaving aside the big paintings which show Buddhas sharing celestial scenes with other deities, we find only once a Buddha not represented as a solitary figure. It is in the silk painting

[80] The same figure of a dancing infant is found in the fragment of a large paper painting Ch. 00373 (*Thousand B.*, Pl. XLVI) showing the torso of a demon, as well as in a painting of the Western Paradise, *Ch. lii. 003 (*Thousand B.*, Pl. II), and in the woodcut, Ch. 00158 (Pl. C).

[1] Cf. Grünwedel-Burgess, *Buddhist Art*, pp. 172 sqq., with regard to the robe covering both shoulders of the Buddha. In the small paper picture Ch. 00160 (Pl. XCII), evidently from an illuminated manuscript, we see a Buddha, however, with the R. shoulder bare.

[2] Silk banners with standing Buddha figures are: Ch. 00115, 00466; i. 001; xx. 002; xxiv. 005 (Pl. LXXXIII); xxvi. a. 0012, this last a mere fragment. For a Buddha seated in *dhyāna-mudrā*, see Ch. 0057. Of larger size are Ch. 00101; xlvi. 009. Banners on linen are Ch. xx. 0010; lvi. 0021 (Pl. LXXXIX).

[3] For paper paintings, mostly of small size, see Ch. 00122, 00160, 00191–202, 00356, 00378, 00392, 00396. a–i, 00402, 00406–408, 00413; xi. 004; xxi. 0015; xxviii. 005.

In Ch. lvi. 0027–31 (Pl. XCII) we find all the five Dhyāni-buddhas represented with their five-lobed crowns and in Bodhisattva costume.

[4] For such Buddha figures in tops of linen banners, see Ch. 00135–41; *i. 0016; iii. 0015, etc.; in miniature paper banners, Ch. 0056. a, b. Such triangular tops of silk banners, found detached, are Ch. 0072, 0086; xxi. 003; of linen banners, 0080. a–c; xxi. 0012.

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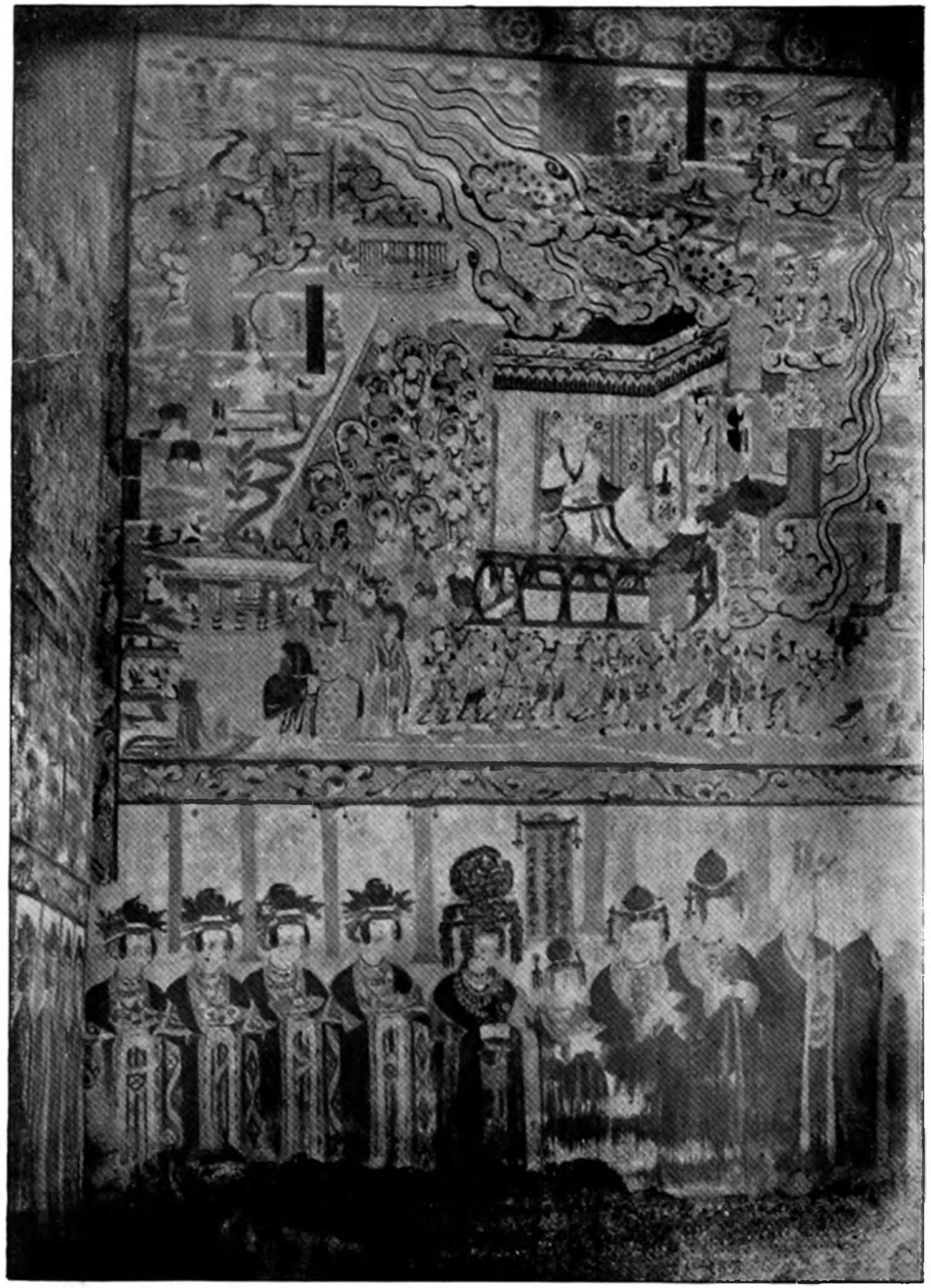
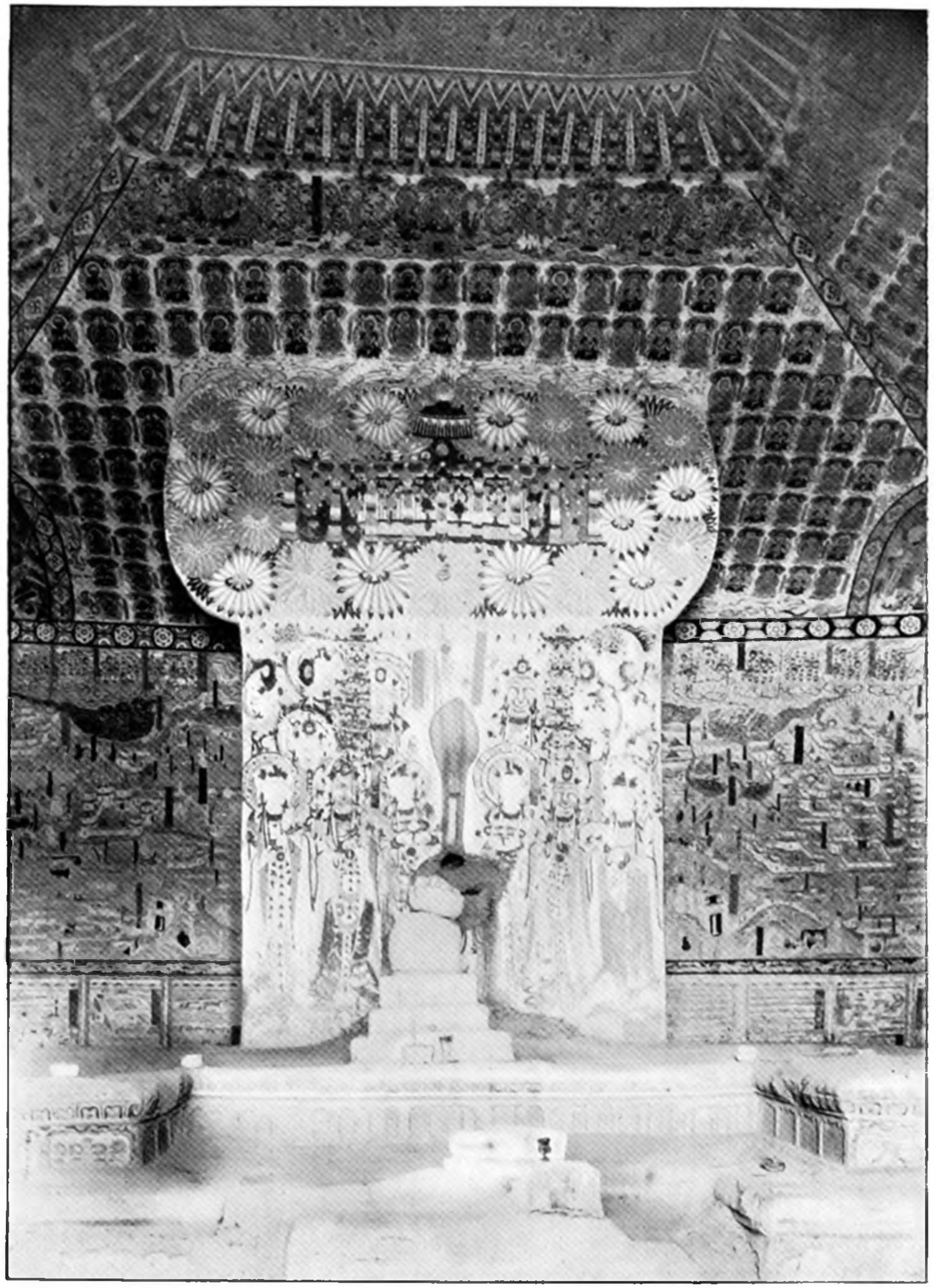
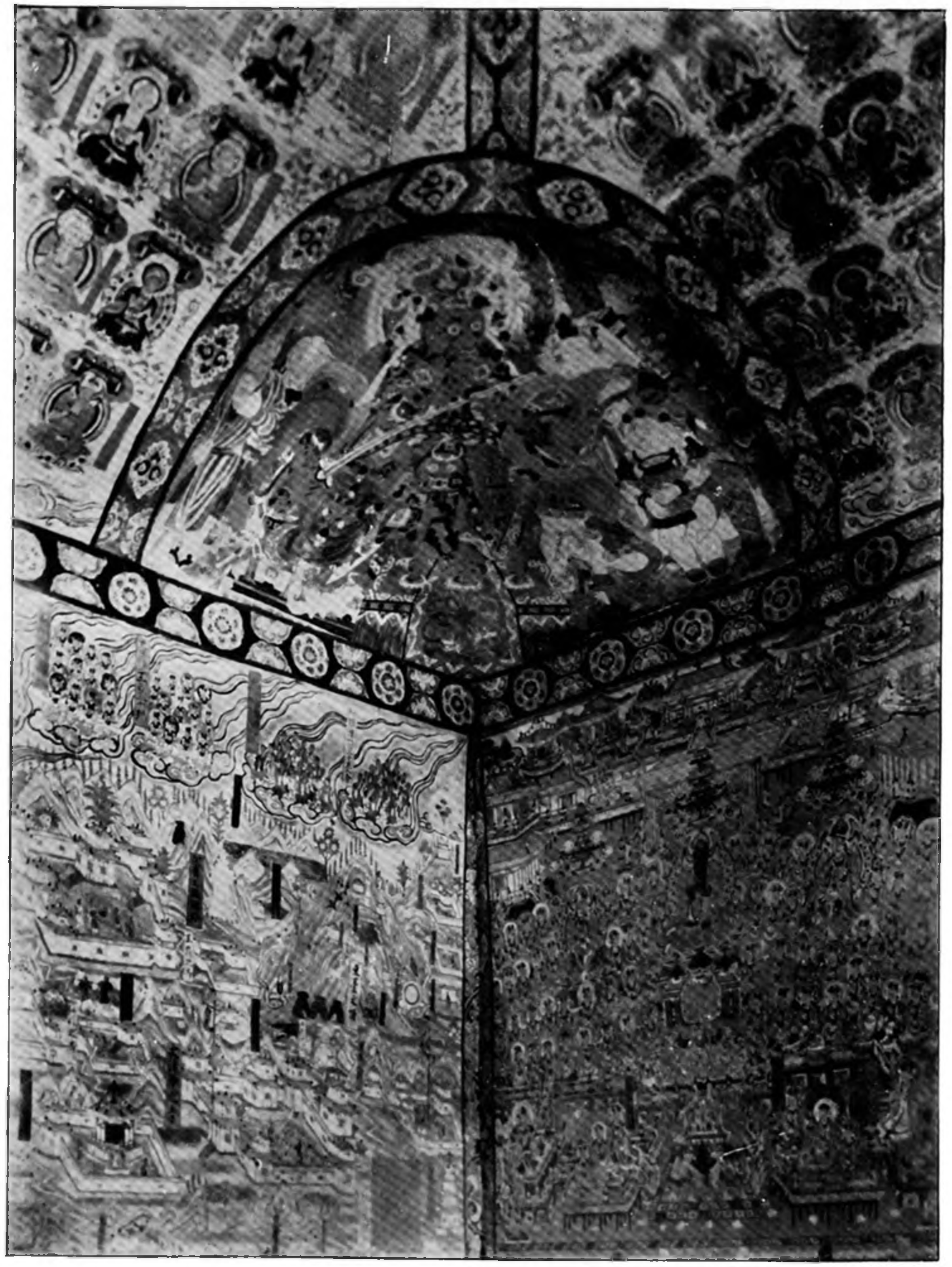


217. PAINTED PANEL xv AND DADO SHOWING KHOTAN PRINCESS WITH FAMILY AND ATTENDANTS, ALSO CHINESE DEDICATORY INSCRIPTION, ON E. CELLA WALL, CAVE CH. VIII, CH'IEN-FO-TUNG.



218. CENTRE OF CELLA IN CAVE CH. VIII, CH'IEN-FO-TUNG, SHOWING PAINTINGS ON SCREEN BEHIND STŪPA, ON WEST WALL AND CEILING.



219. PANELS PAINTED IN TEMPERA, ix, x, IN NORTH-WEST CORNER OF CELLA IN CAVE CH. VIII, CH'IEN-FO-TUNG.

220. PANEL PAINTED IN TEMPERA, v, SHOWING WESTERN PARADISE, ON SOUTH WALL OF CELLA, CAVE CH. VIII, CH'IEN-FO-TUNG.

Ch. liv. 007 (Plate LXXI), originally mounted as a Kakemono and bearing a date corresponding to A.D. 897 in its Chinese inscription. It shows the Buddha Tejaḥprabha, 'the Giver of Light', seated on a chariot which two bullocks draw and surrounded by the genii of the five planets.[5] Carefully executed both in drawing and in its rich colour scheme, the painting owes a special interest to its subject. This recurs treated with remarkable vigour and inventive skill in one of the largest and finest among the frescoes of the 'Thousand Buddhas' Caves'.[6] The detailed interpretation and comparison of the two paintings I must leave to experts.

Buddha *Tejaḥprabha* on car.

Nothing can illustrate better the predominant share which the Bodhisattvas claim in popular Buddhist worship as developed under Mahāyāna influences in the Far East than the fact that about one half of all our Ch'ien-fo-tung paintings are devoted to their representation, whether singly or along with attendant divinities. To this great abundance of pictures there does not correspond an equally great multiplicity of iconographic types. However large may be in theory of devout speculation and fancy the number of different Bodhisattvas, we know that in the North-Indian home of the Mahāyāna system popular imagination had already remained fixed upon a small select group of Bodhisattvas. Even these were, in pictorial or sculptural presentation, distinguished in the main merely by different attributes. We find the same limitation applying to the Bodhisattvas of our Tun-huang Pantheon also.

Preponderance of Bodhisattva paintings.

But for what these Bodhisattva paintings lack in iconographic variety proportionate to their numbers we have compensation offered to us in two directions. On the one hand, we find in this great array of Bodhisattva representations marked differences of style and treatment, and these allow us to trace more clearly than might otherwise be possible the varied influences of India, China, Central Asia, and also Tibet, which helped to give to Buddhist religious art as represented at Tun-huang its composite character. On the other hand, this class of paintings derives greatly increased interest from the fact that it includes, besides the great mass of conventional reproductions of common types, a considerable number of works of individual character and artistic merit. This is particularly the case with some of the larger paintings of Avalokiteśvara, the most popular of all Bodhisattvas. Nor is it possible to overlook the varied iconographic and artistic interest attaching to those big and sumptuous paintings which show us Avalokiteśvara or Kuan-yin surrounded by his divine attendants, and which have received special treatment by M. Petrucci under the designation of 'Kuan-yin's Maṇḍalas'.[7] The fact that for the Bodhisattva paintings all three materials of silk, linen, and paper are used helps further to introduce a certain variety of technique into this disproportionately large class of pictures.

Differences of style and treatment.

For the purposes of our survey it will be convenient first to illustrate the different styles represented among our Bodhisattva paintings by a classification of the very numerous banners showing single Bodhisattva figures, including those which cannot at present be definitely identified in their iconographic character. Turning next to Bodhisattva paintings other than banners, we shall first review the representations of those relatively few individual Bodhisattvas who apart from Avalokiteśvara are recognizable with certainty. Avalokiteśvara or Kuan-yin's predominance in the Buddhist cult of old Tun-huang is attested by so many paintings that their treatment by separate subdivisions is necessary. These can be conveniently distinguished by the different forms in which Avalokiteśvara is represented, whether in human shape, four or six-armed, etc. Examining these forms in succession, we shall have occasion briefly to mention also the pictures showing them accompanied by varying numbers of attendants, as the central figures of those symmetrically

Classification of Bodhisattva paintings.

[5] Cf. for this identification Petrucci, *Annales du Musée Guimet*, xli. p. 134. [See also Mr. Binyon's *Essay*, *Thousand B.*].

[6] See Figs. 215, 226, and below, pp. 933 sq.

[7] Cf. below, pp. 867 sqq., and Petrucci, Appendix *E*, III. viii.

arranged compositions which M. Petrucci, in accordance with Japanese terminology, has designated as the 'Maṇḍalas' of Avalokiteśvara.

Bodhisattva banners in 'Nepālese' style.

It is among the silk banners representing single Bodhisattvas that the different styles influencing Buddhist painting at Tun-huang reveal themselves with particular clearness. Foremost in sharp definition is a small but very distinctive class of banners, Ch. lvi. 001–0010 (Plate LXXXVII), which exhibit a series of Bodhisattvas all in purely Indian style and strikingly homogeneous in execution. As they were all found in the same bundle and are of practically identical size, there can be no doubt that they were intended as a set. In style of design, treatment of garments, ornaments, etc., they show the closest resemblance to the miniatures illustrating Bodhisattvas in two Nepālese manuscripts of the eleventh century, the iconography of which has furnished the subject for a masterly treatise by M. Foucher.[8] A reference to the detailed description given by Miss Lorimer of the common characteristics of these banners [9] will suffice to show that they must have been painted under the direct influence of that late Buddhist pictorial art of India which prevailed in the Gangetic plains, and the style of which Nepāl appears to have preserved in a particularly conservative fashion.[10] That this influence reached Tun-huang straight from the south, i. e. through Tibet, is *a priori* highly probable, and the occurrence of a short Tibetan inscription on one of these banners and of a similar one in Brāhmī on another obviously confirms this. It is worth noting that these banners in no way differ from those of undoubtedly Chinese production as regards material, size, or arrangement of accessories. All of them, judging from attributes, flesh colours, etc., appear to be intended to represent different forms of Avalokiteśvara and Mañjuśrī, and in one case Vajrapāṇi (Ch. lvi. 002).

Bodhisattva banners in 'Indian' style.

We next distinguish a class of Bodhisattva figures, larger than the preceding and more varied in execution, which reproduces characteristic Indian conventions in pose, physical type, dress, and colouring with sufficient closeness to deserve the general designation of 'Indian' for the purposes of classification. We find it well represented among the silk banners and even more frequently among those of linen, while on the few paper banners it is the only one met with. The slender-waisted body of the standing figure is usually shown curving at the hips; its upper part is nude except for rich ornaments and a winding narrow stole, while the hanging drapery of the skirt has folds arranged generally in close conformity with the style of Gandhāra sculpture. The painting of the flesh in different colours according to the deity represented is a characteristic feature which this class derives from its Indian models. That these models had been reproduced already in Central-Asian Buddhist art is certain, and that Tun-huang painting received this type of Bodhisattva through its mediation appears highly probable. But no discussion of the evidence supporting this view is possible in this place. For all detailed features of the type and of its several varieties, reference to Miss Lorimer's descriptions in the List below must suffice here.[11]

[8] Cf. Foucher, *Iconographie bouddhique*, i. Pl. IV–VI, pp. 97 sqq.

[9] See Descriptive List below, General Note on Ch. lvi. 001–0010.

[10] Cf. Foucher, *Iconographie bouddhique*, i. pp. 38 sq.

[11] One variety of silk banners with Bodhisattvas of 'Indian' type is represented by *Ch. lv. 004 (see *General Note*), 007, 008, 0029–0031. Another closely allied variety is found in Ch. 0073; xxvi. a. *007, 009, 0010 (Pl. LXXXVII); a third in lv. *0014, 0032, 0034 (Pl. LXXX), also Ch. 0017, 0097. For a fr., see 00464. a.

How numerous are linen banners of Bodhisattvas of 'Indian' type will be seen from the following list. (Here and in similar lists asterisks * mark banners typical of a large number of others, with descriptive entries recording the characteristics of the group): Ch. 0060, 00133–37, 00141; i. 0015, *0016 (Pl. LXXXIX); iii. 0015–18; xx. 0010, 0012; xxi. 009–11; xxiii. 002–004, 006; xxxviii. 007; liv. 009; lv. 0036–43 (Pl. LXXXVIII); lvi. 0022–24 (Pl. LXV); lxiv. 001–2.

The paper banners show all Bodhisattva figures of the 'Indian' type; see Ch. xx. 0013–15 (Pl. XCIX); xxii. 0032; lxiv. 003–005. With reference to the subjects represented in the Bodhisattva banners of the 'Indian' type and in those of the 'mixed' type (see below), I may note that apart from numerous figures of Avalokiteśvara (Kuan-yin) only the following can be identified with certainty from dis-

That these Bodhisattva pictures of 'Indian' style, however interesting iconographically, cannot compete in artistic merit of design and colouring with the good specimens of the much larger 'Chinese' class to be briefly described next will be obvious from an examination of the 'Indian' Bodhisattva banners reproduced in Plates LXXX (Ch. lv. 0034), LXXXVII (*xxvi. a. 007, 0010), LXXXVIII (lv. 0037), LXXXIX. That the production of both types of Bodhisattva banners was in the main local is scarcely subject to doubt. It is directly attested by the number of specimens which show a mixture of characteristic features from either, and further by the fact that we find both types represented among the pictures comprised in what manifestly is one simultaneously produced series or set.[12] Here I may conveniently mention also that Bodhisattva figures, mostly of 'Indian' type and usually traced in mere outlines, serve for the decoration of a number of silk rolls which, though not having the regular shape of banners, may yet be supposed to have been intended for display in a similar fashion.[13]

Mixture of 'Indian' and 'Chinese' Bodhisattva types.

The other type of Bodhisattva figures, which for brevity's sake we may designate here as the 'Chinese', is presented to us by the great majority of the silk banners as well as by a small number of linen ones. It is unnecessary for us to discuss here the detailed features which distinguish this type clearly from the preceding ones. They will be found duly indicated in the descriptions of typical examples as recorded in the List,[14] and the reproductions of such specimens as are furnished by Plates LXXVII–LXXXIII help more than any description of details to demonstrate the general character of the type and to justify its designation as 'Chinese'. Though in certain features of the figure, dress, and jewellery, as well as in some of the emblems and accessories, it is still easy to recognize the influence of originally Indian convention, yet the general type evolved and its artistic treatment are unmistakably and thoroughly Chinese. The banners show us the type of these 'Chinese' Bodhisattvas in a finished stage of development. For, as Miss Lorimer rightly points out in a general note, 'the same type of figure, dress, jewels, canopies, etc., appears in all, with narrow variation in details; and the same perfected technique, in different degrees of delicacy or carelessness. Both subjects and treatment have become stereotyped, and the paintings are accordingly marked by a certain monotony and lifelessness on the imaginative side; but the conventions followed, in externals, are full of grace and dignity. In particular, the Chinese mastery of line finds full scope in the treatment of the trailing robes in which this particular class of divinity is arrayed'.

'Chinese' type of Bodhisattvas in banners.

tinct emblems or inscriptions: *Mañjuśrī* (Ch. 0036; xxii. 004; *xxvi. a. 007; lv. 0030); *Vajrapāṇi* (lv. 008); *Kṣitigarbha* (Ch. 0060). With regard to the last named it is significant that only the inscription distinguishes this figure from its replica in *i. 0016, here labelled as Kuan-yin or Avalokiteśvara.

[12] Thus we see features and general treatment of the 'Chinese' Bodhisattva type combined with the pose, dress, jewellery, etc., of the 'Indian' type in the silk banners Ch. 00116; i. 007; xxii. 004; xxxviii. 002 (Pl. LXXXI); xl. 005. The same is the case in the series Ch. *00108, 00110; xlvi. 0010–11, all evidently from the same hand and, where sufficiently preserved, bearing Tibetan inscriptions.

The fine silk banner Ch. 0036 (*Thousand B.*, Pl. XXVII), representing Mañjuśrī on his lion, may also be mentioned here as a good example, as it shows Indian conventions in physical type, pose, and dress carefully preserved, while the features of the deity and the figure of his 'Vāhana' are treated in a style closely corresponding to that of the 'Chinese' Bodhisattva type.

As instances of sets or series of banners comprising specimens of both the 'Indian' and 'Chinese' Bodhisattva types may be quoted, e.g., the companion pictures (those of 'Indian' type being placed first) *Ch. xxvi. a. 007 :: xxvi. a. 009 (Pl. LXXXVII); xxiii. 006 :: Ch. 00140; liv. 009 :: *liv. 008.

[13] See Ch. 00474–80; xxiv. 008. Most of these show the same Bodhisattva figure repeated several times, evidently by means of stencils. Ch. xxviii. 007, measuring over 12 feet in length and of silk damask, shows a standing Bodhisattva of life-size. Two silk banners, Ch. 0024, 0089, otherwise complete with accessories, show respectively a floral design and a Padmāsana drawn or stamped.

[14] Cf. the descriptions under *Ch. 001, *002 for these Bodhisattva banners as a whole; under *i. 003 for those representing Kṣitigarbha, and *xvii. 001 for a small variety differentiated in dress but as yet unidentified.

Identification of Bodhisattvas in banners.

It is the uniformity resulting from this full development of the type which seems largely responsible for the difficulty experienced about determining the particular Bodhisattva intended in the case of the bulk of these banners. Leaving aside the representations of Mañjuśrī and Samantabhadra, which their respective 'Vāhanas', the lion and elephant, render safely recognizable,[15] and those showing Kṣitigarbha as a monk in his distinctive garb,[16] only very few of the Bodhisattvas on these banners can at present be identified on the strength of characteristic emblems or of inscriptions. Even the latter where they are filled in do not always help us, though it is probable that appellations like the 'Bodhisattva who knows no obstacle' (Ch. iii. 002) or the 'Bodhisattva who joins the hands' (Ch. xxii. 003) are meant to refer to particular forms of Avalokiteśvara. From the great preponderance of Avalokiteśvara among Bodhisattva pictures other than banners it may, in fact, be safely concluded that most of the unidentified Bodhisattva figures in the banners also were intended for, or could be passed off as, representations of that popular divinity, the ever merciful Kuan-yin, in one form or another.[17]

Bodhisattva banners of artistic merit.

I must leave it to the future researches of experts to ascertain what distinctions, if any, may be implied by such special features as the censer, glass bowl, or mantle carried by some of these figures, or by the different poses of the hands. Here it must suffice to single out for brief mention those banners which by their artistic merit or otherwise stand out from the rest. *Ch. 002 (Plate LXXXII) is a typical Bodhisattva banner of this class retaining all accessories and with its colours exceptionally fresh. Ch. 0025 (Plate LXXVII), a painting excellently preserved and of highly finished workmanship, is of interest on account of the unusual attitude, the figure being shown as walking away from the spectator.[17a] Ch. i. 002 (Plate LXXVIII) is one of the most striking banners, remarkable for the skilful pose of the figure combining dignity with rapid movement, for the rich colour scheme of the garments, and for the pronounced and distinctly non-Chinese features shown by the Bodhisattva's face. Very fine in its glow of colours and delicate graceful drawing is also the banner Ch. iii. 002 of the 'Bodhisattva who knows no obstacles'. Faultless workmanship within the stereotyped conventions of the style, along with remarkably harmonious colouring, is shown also by Ch. i. 0013, xxiv. 006, both of which Plate LXXVIII successfully reproduces in colour. Ch. lviii. 004 (Plate LXXXI) is deserving of special notice on account of its fine decorative effect and the individual expression imparted to the face. That by the side of such well-characterized

[15] *Mañjuśrī*, on his white lion, is found on Ch. 0023, 00465; xxii. 001. For *Samantabhadra*, seated on the white elephant, see Ch. xx. 001 (Pl. LXXXII); xxii. 0021; xlvi. 006.

[16] *Kṣitigarbha*, seen in Ch. 00111; *i. 003 (Pl. LXXXIII); xxi. 0013; xxiv. 004; xl. 006; lxi. 004, is always clearly distinguished by the shaven head of the monk and the barred or mottled mantle, the mendicant's garment. Regarding this form of Kṣitigarbha, known also of the Japanese *Jizō*, cf. Petrucci, *Conférences au Musée Guimet*, 1914, p. 134. In xxi. 0013, lxi. 004 he carries with his left hand a flask; elsewhere he holds the more familiar emblem of the flaming jewel.

[17] Silk banners showing Bodhisattvas which have not been definitely identified, are: *Ch. 001 (Pl. LXXIX), *002 (Pl. LXXXII), 003 (Pl. LXXVII), 009 (Pl. LXXIX), 0011, 0025 (Pl. LXXVII), 0081 (Pl. LXXXII), 0083, 0096, 00109, 00112–13, 00462–4. b, 00520; i. 002 (Pl. LXXVIII), 005, 008, 0010; iii. 001–002; xxii. 003, 0024; xxiv. 006 (Pl. LXXVIII); xxvi. a. 008, 009 (Pl. LXXXVII); xxvii. 003; xxx. 001; xl. 004; xlvi. 001–3, 0012; lv. 0013, 0019 (Pl. LXXXI), 0026, 0044; lviii. 004 (Pl. LXXXI), 005; lxi. 007.

In Ch. 0016; i. 0013 (Pl. LXXVIII); iii. 003; xxiv. 002. a, 003; xxxiv. 001, 003; lv. 0045, Avalokiteśvara is clearly indicated by distinctive emblems or the inscription. He is likely to be intended also in Ch. 0011, 0055; i. 0010; iii. 002; lv. 0019.

A small separate group is formed by the silk banners Ch. 00142 (Pl. LXXXI); xvii. 001 (Pl. LXXX); lv. 006 (Pl. LXXX), which show an unidentified Bodhisattva, in peculiar pose and costume including a large mantle.

Here may be mentioned also a silk banner of unusual sort, Ch. 00303, showing the figure of the 'Bodhisattva of the Sun' merely outlined in white on a blue silk ground. For the interesting stencilled design on the silk piece taking the place of the bottom streamers, see below, p. 987.

Linen banners of Bodhisattvas of 'Chinese' type are Ch. 0061, 00139–40; xxiii. 007; *liv. 008 (Pl. LXXXVIII). In Ch. xxvii. 004 the inscription indicates Avalokiteśvara.

[17a] The same pose is found also in Ch. 00462.

productions we should also meet with a number of banners which are unmistakable replicas of others actually represented in the collection can in no way cause surprise.[18]

Bodhisattva paintings in Tibetan style.

Among the Bodhisattva pictures other than banners the vast majority represent Avalokiteśvara either singly or with attendant divinities. Before, however, we proceed to a rapid synopsis of them or to that of the much smaller groups showing other Bodhisattvas, either alone or in their respective 'Maṇḍalas', it will be convenient to refer to two pictures and the fragments of a third and fourth which stand apart from the rest as illustrations of the Tibetan style of painting not otherwise represented in the collection. No better place can be found for mentioning them, even though one, and this the more interesting, does not appear to represent a Bodhisattva but the goddess Tārā, the 'Śakti' of Avalokiteśvara. Ch. lii. 001 is a completely preserved painting on linen showing colours laid on in distemper over a coat of a white waxy substance.[19] Executed in the matured Tibetan style, it is probably one of the earliest examples existing. It shows the goddess seated on a floating lotus and surrounded by eight subsidiary forms of Tārā, with small scenes of danger and deliverance interspersed between them. A striking demonic figure is seen in the centre foreground, mounted on a horse.[20] A second example of purely Tibetan style is Ch. lv. 0024, a large painting on close-woven linen representing Avalokiteśvara seated, with small figures of Bodhisattvas and sacred emblems filling the rectangular frame which encloses the main image. In Ch. 00383. a–c we have large fragments of two paper paintings executed in purely Tibetan style, of which one probably contained a 'Maṇḍala' with Tantric divinities, while all that remains of the other shows a series of seated Bodhisattvas.

Paintings of Bodhisattvas other than Avalokiteśvara.

The paintings which show Bodhisattvas other than Avalokiteśvara are relatively so few that it will be convenient to mention them first. Mañjuśrī, on his lion, is represented in the paper painting Ch. 00163 (Plate XCI) in the same style as he appears on the banners. Vajrapāṇi and the 'Bodhisattva of the Sun' are the subjects each of a single paper painting, the former of Ch. lviii. 009 and the latter of Ch. 00211. The second Bodhisattva is characterized by the sun-bird which figures so frequently in certain 'Maṇḍalas' of Avalokiteśvara to be described below.[21] A small series of paper paintings, Ch. 00162 (Plate XCI); xvii. 002; xxii. 0033, shows us Bodhisattva-like divinities, riding on phœnix, peacock, or yak, which still await certain identification.

Paintings of Kṣitigarbha.

But far more interesting and important, in respect both of iconography and artistic value, are the paintings which represent Kṣitigarbha, Avalokiteśvara's only possible rival in popularity among the Bodhisattvas of the Buddhist Pantheon of the Far East. We have already had occasion to mention the banners which show him in the priest's garb like the Japanese Jizō.[22] 'He is one of the Eight Great Bodhisattvas. Through countless incarnations he has been working for the salvation of living beings, and he is in especial honoured as the breaker of the powers of hell. With his pilgrim's staff he strikes upon the doors of hell and opens them, and with the lustrous pearl which he carries he illuminates its darkness.'[23] The several aspects of his character are well illustrated by our paintings. In Ch. 0084 (Plate LXX) and i. 0012 (Plate LXII), the former a picture of considerable charm, we see him seated as Patron of Travellers, holding the emblems just mentioned and with his head dressed in the traveller's shawl.[24] Ch. lvi. 0017, a large silk painting,

[18] Thus we have e.g. replicas of Ch. 0083 in i. 005 and lv. 0026; of 003 in xl. 004; of i. 002 in xlvi. 001; of lv. 006 in Ch. 00142, etc.

[19] For a reproduction in colour, see *Thousand B.*, Pl. XXXI. M. Petrucci, in Appendix *E*, III. viii. sec. 4, takes the central figure for Avalokiteśvara and the surrounding figures for different forms of that Bodhisattva.

[20] A representation of Tārā is found in the collection only once again, in the fragment of a paper painting, Ch. 00401, executed in 'Indian' style and apparently showing the goddess in the garb of a Bodhisattva.

[21] See below, pp. 868 sq.

[22] See above, p. 864, note 16.

[23] Cf. Mr. Binyon's notes in *Exhibition of Stein Collection*, pp. 7 sq.

[24] For a reproduction in colour, see *Thousand B.*, Pl. XL.

shows him seated in monk's guise as Lord of the six *gati*, or 'Worlds of Desire', with six clouds emanating from his person and carrying figures emblematic of the worlds of gods, men, animals, etc. In Ch. lviii. 003 (Plate LXVII),[25] a silk painting inscribed and dated A.D. 963, he appears in the same character, but dressed as Patron of Travellers and attended by two kneeling Bodhisattvas.

Kṣiti-garbha's 'Maṇḍalas'.

Another type of Kṣitigarbha's 'Maṇḍalas', the iconographic interest of which M. Petrucci has fully discussed,[26] is presented by a number of paintings in which the Bodhisattva figures as Protector of Souls in Hell, surrounded by the ten Infernal Judges and other attendants. Their figures and the scenes of hell punishment over which they preside are always executed in purely Chinese style, just as the donors shown below in these paintings. Kṣitigarbha himself is dressed as the Patron of Travellers. *Ch. 0021 (Plate LXVII), a large painting on silk, is a typical example.[27] With these paintings may be classed the curious paper roll, Ch. cii. 001 (Plate XCIII, CIII), which in spirited drawing shows scenes of judgement and punishment in a Buddhist hell, with Kṣitigarbha in monk's guise appearing at its end to receive condemned souls driven by demons. Finally, two silk paintings, Ch. xxviii. 003; lxi. 009, the latter remarkable for its fine and impressive colouring,[28] show us 'Maṇḍalas' of Kṣitigarbha in which the figures attending him in both his functions, as Lord of the Six Worlds and as Regent of Hell, are presented together.

Classification of Avalokiteśvara paintings.

The position which Avalokiteśvara, the Bodhisattva of Mercy, occupies in the Buddhist Pantheon of Tun-huang is just as predominant as that of Kuan-yin or 'Kwannon' in the modern Buddhist worship of China and Japan.[29] This is sufficiently brought out by the fact that fully ninety-nine of our paintings represent him, apart from the many Bodhisattva banners in which he is definitely recognizable or likely to be intended. For the classification of this large number of paintings the different forms in which the Bodhisattva's figure appears, either singly or accompanied by divine attendants, may serve as a convenient basis. It is true that there are also distinctions noticeable in the style of painting. But obviously in the elaborate pictures where Avalokiteśvara appears attended by other divinities, i.e. in his 'Maṇḍalas', these distinctions could not be recognized so readily as those provided by the physical type of his figure. Following our usual course of proceeding from the simple towards the more elaborate forms, we shall first pass in rapid review the paintings which present the Bodhisattva in ordinary human shape, and then turn to those where he appears with four, six, eight, or, theoretically at least, with a thousand arms and a corresponding multiplicity of heads. We may follow this order all the more conveniently because it will also lead us up from the simpler in the end to the most elaborate of the divinity's Maṇḍalas.

Avalokiteśvara, human, of 'Indian' type.

In the paintings which show Avalokiteśvara in human form and without attendants, we see him both standing and seated. Where he carries attributes, they are usually the lotus bud or the flask of ambrosia. These and the figure of his Dhyāni-buddha, Amitābha, which very frequently appears in front of the tiara, are also familiar emblems in his Indian representations. To them there must be added the willow spray which a legend popular in Far-Eastern Buddhism, to be noticed below, has made a particularly characteristic attribute of the Bodhisattva. Among the

The figure of a Bodhisattva in the fragment Ch. xlix. 001 of a large silk painting, holding a long brown staff with the left hand, may, perhaps, have been intended for Kṣitigarbha; but the identification of the badly preserved fragment is difficult.

[25] See also *Thousand B.*, Pl. XXV.

[26] Cf. Petrucci, Appendix *E*, III. ix.

[27] For another reproduction; see *Thousand B.*, Pl. XXV. It may be noted that one of the Judges is clad in full armour instead of Chinese magisterial dress; so also in Ch. 00355; xxviii. 003.

Other specimens of this type of Kṣitigarbha's 'Maṇḍala' are Ch. 00225, on silk; and, in a simplified form, the paper paintings Ch. 00404, lxiii. 002.

[28] For a reproduction in colour, see *Thousand Buddhas*, Pl. XXXIX.

[29] The predominance of Avalokiteśvara was equally marked already in Indian Buddhism; cf. Foucher, *Iconographie bouddhique*, i. p. 97.

paintings of this class we find represented both the styles which have been distinguished above in the case of the banners as 'Indian' and 'Chinese'. Of the former the silk painting Ch. xviii. 003 (Plate LXX) must be mentioned as remarkable for grace and refinement.[30] The silk paintings Ch. 00157, 00221 show Avalokiteśvara seated. The great majority of Avalokiteśvara paintings on linen or paper belonging to this class also display features of the 'Indian' Bodhisattva type. *Ch. 0052, iii. 0011 (both Plate LXXXIX) and xx. 009 (Plate LXXXVIII) may be quoted as characteristic specimens.[31] With the few examples of the 'Chinese' Bodhisattva type[32] may be mentioned also the large silk painting Ch. 0091 (*Thousand B.*, Plate XVIII), noteworthy as a work of considerable artistic merit. The figure of the standing Avalokiteśvara has here an impressive air of individuality, largely due to the delicate drawing of the youthful face, while the pose and dress closely reflect Indian models.

Avalokiteśvara of mixed type.

A combination of elements of both the 'Indian' and 'Chinese' Bodhisattva types is exhibited also by a number of silk and linen paintings all showing Avalokiteśvara standing. Among them the silk paintings *Ch. 0088 (Plate LXIX), 00451 (*Thousand B.*, Plate XLIV), xxxvi. 001 (Plate LXVIII), liii. 005 (*Thousand B.*, Plate XXI), liv. 006 (Plate LXIX) may be specially noted on account of their fine workmanship.[33] We find also a mixture of 'Indian' features in dress and ornament with Chinese style in two interesting pictures of a peculiar type, Ch. i. 009, lvi. 0015. In them Avalokiteśvara appears sitting by the water on a bank under a willow and holding a willow-branch in his hand. Ch. i. 009 (Plate LXXIX; *Thousand B.*, Plate XXIV) is a paper painting of very fine design and execution. These pictures claim special iconographic interest because according to Far-Eastern tradition 'it was an Emperor of the Sung period who first in a dream saw' Avalokiteśvara as he is here depicted, 'and commanded the dream to be painted; but, no doubt, the subject is of earlier origin.'[34]

Avalokiteśvara sitting under willow.

Avalokiteśvara in human form, with attendants.

We now come to the group of paintings which show Avalokiteśvara in human form accompanied by attendants. Among them may be mentioned first two silk pictures in which the Bodhisattva appears standing or walking in the character of Guide of Souls, the soul being represented in each case in the guise of a Chinese lady following behind the god. Ch. lvii. 002 (Plate LXXI), treated entirely in Chinese style, is a painting of extreme refinement both in design and in its soft and harmonious colouring. The celestial mansion to which Avalokiteśvara leads the soul of his worshipper is seen above on curling clouds. The picture was mounted as a Kakemono, as was also Ch. lvii. 003, which shows the Bodhisattva attired in dress of 'Indian' type and carrying a banner. Here, too, there is on the top an indication of the celestial mansions, but only in a schematic fashion. Though carefully executed, this painting looks like an inferior version of the former. By itself stands the silk painting Ch. xxi. 001, dated A.D. 963. It shows an Avalokiteśvara figure of the 'Indian' type, standing within an elliptical vesica, outside which are ranged small scenes of danger and calamity such as are found also on some of the 'Maṇḍalas' to be mentioned below. They are meant to represent the risks from which the Bodhisattva is expected mercifully to deliver his worshippers.

Attendants of Avalokiteśvara.

The bulk of the paintings which belong to the above group show Avalokiteśvara seated and in figure, pose, and dress reflecting Indian tradition.[35] By his side are presented divine attendants of different kinds and in varying numbers. Bodhisattvas appear in Ch. 00167 (Plate LXI); xx. 005;

[30] For a reproduction in colour, see *Thousand B.*, Pl. XX.

[31] Other linen paintings of 'Indian' style are Ch. 00126, 00129–30, xxi. 007–8; xxxiv. 005; xlvi. 0011. a. For paper paintings, see Ch. 00384, 00387, 00393, 00400. b, c, 00411; liv. 0011.

[32] Specimens in this style are Ch. xxii. 0030; lvi. 0016, on silk, and Ch. 00403, on paper. In all the figure is standing.

[33] For other examples, see on silk Ch. 0028; on linen, Ch. 00128; lv. 0035.

[34] Cf. Mr. Binyon's note, *Exhibition of Stein Collection*, p. 12.

[35] The group comprises the silk paintings: Ch. 00121 (*Thousand B.*, Pl. XLIII), 00124, 00167 (Pl. LXI); iii. 0013; xx. 005; xxii. 0016; xxxiii. 0011 (identification uncertain); xlvi. 0014; lvii. 004 (Pl. LXVI). Ch. 0054 is on paper.

xxii. 0016, and also in the fragmentary silk paintings Ch. 00461; iii. 0013; Lokapālas alone or together with Bodhisattvas in Ch. 0054 (*Thousand B.*, Pl. XXIV), 00121 (*ib.*, Pl. XLIII); xlvi. 0014. In the last-named picture there appear also two juvenile figures. These may correspond to the Good and the Evil Genius distinctly named by inscriptions in Ch. lvii. 004 (Plate LXVI) and there represented as young men standing on either side of Avalokiteśvara.[36] They may be represented also by the two men in peculiar head-dress who are seen standing by the side of Avalokiteśvara in Ch. 00124.

Paintings of Four-armed Avalokiteśvara.

Of the relatively few paintings in which the Four-armed Avalokiteśvara is represented all but one show him carrying the symbols of the Sun and Moon with his two upper hands.[37] We find these celestial bodies and the Bodhisattvas personifying them specially associated with Avalokiteśvara also elsewhere. In the silk painting Ch. lvii. 001 (Plate LXVIII) the figure of Avalokiteśvara conforms in all respects closely to Indian tradition, whereas the two youthful attendants, probably meant for the Genii just referred to, as well as the figures of the side scenes showing the 'Calamities' from which the Bodhisattva preserves his worshippers, are in thoroughly Chinese style. Among the paper paintings, Ch. 00395, 00397, 00522, the last shows Avalokiteśvara surrounded by Bodhisattvas and small four-armed divinities.

Six-armed Avalokiteśvara.

Very large is a class of paintings which present Avalokiteśvara's figure as six-armed. In most of them it appears seated, and in physical type, pose, and dress conforming with Indian tradition. But several sub-divisions may be distinguished according to the number of heads displayed by the Bodhisattva. He appears with a single head in numerous pictures[38]; in most of them the upper pair of arms carry the symbols of Sun and Moon, while the rest display diverse attributes or 'Mudrās'. In all silk paintings except one there are shown divine attendants of varying character and number, including Bodhisattvas, Lokapālas, and the 'Nymph of Virtue' and the 'Sage' to be mentioned below. In Ch. xl. 008 attendants are replaced by side scenes representing 'Calamities'. Among the attendants also found in several of the paintings on linen and paper we meet again with the Good and the Evil Genius already mentioned.[39] Ch. xx. 004 is curious as showing the Bodhisattva Maitreya in worshipping attitude and facing the donor below. A nine-headed form of Avalokiteśvara is found only once, Ch. 00385, a paper painting which shows no other noteworthy divergence.

Avalokiteśvara with eleven heads.

A numerous sub-division again is formed by the paintings where Avalokiteśvara, six-armed, is made to carry eleven heads.[40] Two of these are discreetly shown in profile by the side of the chief head; the remaining eight, all small, are arranged to form a pyramid above the tiara, the one at the apex usually representing the Dhyāni-buddha.[41] Among these paintings, which all share the conventions as regards type, hands, etc., already referred to, only two show Avalokiteśvara singly without attendants. The well-preserved linen painting, Ch. xxi. 005 (Plate LXXXIX), which is one of them, may serve as a good illustration of the group. With this we must finally mention two silk paintings, *Ch. 00102 (Plate LX) and xxii. 0010, in which the eleven-headed Bodhisattva is given eight arms instead of six. *Ch. 00102 is a particularly sumptuous composition. It shows in

[36] For the interpretation of these youthful figures, which M. Petrucci takes for attendants of Tantric character representing the benign and the terrible activity of the Bodhisattva and corresponding to the Japanese *Dōjin*, cf. his remarks in Appendix *E*, III. x. See also Chavannes, App. *A*, V. B.

[37] Regarding the Chinese legends of non-Buddhist origin, from which these symbols are derived, cf. *Ch. 00102 in List below.

[38] Paintings on silk are: Ch. 00103, 00460; xx. 004; xxii. 002; xxvi. 001 (*Thousand B.*, Pl. XXIII); xl. 008; lv. 003; lviii. 002; on linen: Ch. 00125, 00127, 00131; on paper: Ch. 00404; i. 0017 (Pl. XCI)–18; xvii. 002.

[39] See Ch. 00125; i. 0017 (Pl. XCI).

[40] Paintings on silk are: Ch. 00105; xxi. 0014; xxii. 0025 (?); xxviii. 004; xxxvii. 001; xlvi. 0013; on linen: xxi. 005 (Pl. LXXXIX); lxii. 001; on paper: 00184, 00389–90; lxvi. 002.

[41] For Indian representations of Avalokiteśvara with eleven heads, cf. Foucher, *Iconographie bouddhique*, i. p. 106, note 2.

Avalokiteśvara's *cortège*, besides the Buddhas of the ten quarters, Lokapālas, etc., two monkish disciples, such as we shall meet with further on in certain pictures of Buddhist Heavens; it offers additional iconographic interest because all these divine personages are named by inscriptions.[42]

Paintings of Thousand-armed Avalokiteśvara.

There remains for review only one class of Bodhisattva paintings, the one which represents the 'Thousand-armed Avalokiteśvara', in almost all cases surrounded by more or less numerous divinities constituting his 'Maṇḍala'.[43] These paintings comprise some which may rank among the richest of the collection in respect of decorative effect and colouring. Elaborate as most of them are, they need not detain us long; for they are all arranged on practically the same scheme, of which a full analysis will be found in Miss Lorimer's *General Note* on *Ch. 00223, and the colour reproductions provided of two particularly fine specimens, Ch. xxviii. 006 (Plate LXIV); lvi. 0019 (Plate LXIII), will help better than any description to illustrate the characteristic features of the class. In addition, M. Petrucci has discussed at length the numerous and interesting questions of iconographic detail which are raised by figures attending Avalokiteśvara in the sumptuous compositions.[44]

Figure of Thousand-armed Avalokiteśvara.

In all these paintings Avalokiteśvara's large figure is seen in the centre surrounded by a nimbus-like disc. This is formed by his outer hands making up the theoretical number of a thousand, and each showing an open eye marked on the palm.[45] The inner hands, which vary in number, carry a multiplicity of sacred emblems. The Bodhisattva is always shown single-headed, except in Ch. liv. 001; lvi. 0019, where he carries eleven heads arranged in the manner of his six or eight-armed manifestation. In all pictures on silk or linen he appears seated, and only one of them, Ch. 0029, represents him singly, as do two out of the three paper paintings.[46] In these last he is shown standing. The number of divine personages depicted in Avalokiteśvara's Maṇḍala varies greatly, from the two seen in Ch. xl. 007 (Plate XCI) and xxxiii. 002 to the pompous array of Buddhas, Bodhisattvas, Lokapālas, etc., surrounding his image in such elaborate compositions as Ch. lvi. 0014, 0019 (Plate LXIII).[47]

Attendants of Thousand-armed Avalokiteśvara.

Among these attendant divinities some deserve to be mentioned here: the Bodhisattvas of the Sun and Moon because they are almost invariably represented, others on account of their special character, or because they are confined to Avalokiteśvara's Maṇḍalas. Thus in the lower portion of these pictures there are always found demonic Vajrapāṇis in violent attitudes clearly suggestive of Tantric origin; also two human-shaped Nāgas standing in the tank below Avalokiteśvara's figure and supporting the cloud on which his disc rises. Interesting are two ever-present figures, usually drawn with particular skill and grace, representing the 'Nymph of Virtue' and the 'Sage of the Air' (?).[48] The two paintings Ch. lvi. 0014, 0019 are particularly rich in attendant divinities, and the iconographic interest of these is increased by the inscriptions which fortunately are filled in

[42] Attention may be called here in passing to the deep pink colour of Avalokiteśvara's head and body in this painting and apparently in others of which it is a typical specimen (see Ch. *00102, in List). This colouring seems peculiar to Nepalese representations of Avalokiteśvara; cf. Foucher, *Iconographie bouddhique*, i. p. 99.

[43] The silk paintings belonging to this class are: Ch. 0029, *00223, 00452, 00458–9; iii. 004; xxviii. 006 (Pl. LXIV); xxxiii. 002; xxxviii. 001; liv. 001; lvi. 0014, 0019 (Pl. LXIII); on linen: xxi. 006 (Pl. LXV); on paper: 00386, 00394. a, b; xl. 007 (Pl. XCI).

[44] See Petrucci, Appendix *E*, III. viii. 1.

[45] Avalokiteśvara's thousand arms, arranged in this fashion and emblematic of the merciful divinity's desire to save all human beings at the same time, are well known, too, to the later Buddhist iconography of India; cf. Foucher, *Iconographie bouddhique*, i. p. 106, for references to representations of *Sahasrabhuja, Sahasrabāhu* Lokanātha (Avalok.).

[46] Ch. 00386, 00394. a, b. In Ch. xl. 007 (Pl. XCI) the attendants are confined to the 'Nymph of Virtue' and 'the Sage'.

[47] For a fragmentary Maṇḍala of Avalokiteśvara, with processions of Samantabhadra and Mañjuśrī, Ch. xxxvii. 004, cf. below, p. 881.

[48] Thus described by inscriptions in Ch. lvi. 0014 (see List); for representations see Pl. LXIV (Ch. xxviii. 006); XCI (Ch. xl. 007).

to explain them. Here it must suffice to note that besides other Indian gods, such as Indra and Brahmā, there also appear among them unmistakably Śivaitic deities like Maheśvara and Mahākāla. They afford further clear evidence that Hindu mythology, even in its later development, did not cease to assert its influence on the Buddhist Pantheon as it meets us here at the confines of Central Asia and the Far East.

Section VI.—LOKAPĀLAS AND VAJRAPĀṆIS

Early conception and popularity of Lokapālas.

From the great array of Bodhisattva representations, with their often ill-defined types and the manifold problems and doubts which attend their iconographic interpretation, we may turn with some relief to the much smaller, but in various respects distinctly interesting, group of paintings which show us the Four Lokapālas, or Guardians of the Regions. Minor divinities though they are, their importance for Buddhist iconography is subject to no doubt. The early origin of their conception is well attested in Indian art and tradition alike, and equally certain is the great popularity they have attained in the Far East, as shown by the conspicuous place which their figures still continue to occupy at the gates of, as well as within, Chinese and Japanese temples. The fact that the iconographic type of these modern representations is in all essentials directly derived from the one clearly fixed in our Ch'ien-fo-tung paintings adds greatly to the interest of the latter.

Indian type of kings of demons.

The Protectors of the Four Regions appear there invariably as warrior kings arrayed in gorgeous dress and armour and accompanied by 'supporters' symbolizing the hosts of Yakṣas, or demons, over whom they rule according to early Indian notion. The uniformity with which these figures are presented to us, in spite of all the richness and freedom of details, indicates a fully established type, and fortunately frescoes and sculptures brought to light by recent explorations in Eastern Turkestān permit us clearly to trace back its essential elements to Central Asia, and thence to Gandhāra. It cannot be my task here to follow up this development, nor even to attempt a documentation of its principal stages. As regards early Indian representations it must suffice to mention that the principal Lokapāla, Vaiśravaṇa, the Guardian of the North, already figures as the Yakṣa king Kubera on a pillar of Barhut, standing in characteristic pose on his demon 'cognizance',[1] and that Gandhāra sculpture, too, represents him with attributes which we can still trace in our Ch'ien-fo-tung paintings.[2]

Lokapāla figures in Turkestān and China.

Turning to Central Asia we meet with an abundance of close links. Among my own earliest finds there was the stucco figure of Kubera in a Dandān-oilik shrine which shows him accoutred in elaborate scale armour and with his feet on a crouching demon, exactly as we see him in our paintings, and yet without any trace of Chinese influence in the treatment.[3] The four Lokapāla statues that I found guarding the entrance to the great Rawak Vihāra of Khotan were an earlier link with Gandhāra, but showed with equal clearness characteristic features of dress and the gods' significant cognizances.[4] Since then the wall-paintings and sculptures of Buddhist shrines near Kuchā, Kara-shahr, and Turfān have been found to display Lokapāla representations in plenty. Among them not a few either closely resemble those of our paintings or in striking fashion illustrate

[1] Cf. e.g. Grünwedel, *Mythologie des Buddhismus*, p. 15, Fig. 6.

[2] Cf. Grünwedel-Burgess, *Buddhist Art in India*, pp. 40, 45, 136 sqq. Fig. 88 shows Vaiśravaṇa seated as king, with features unmistakably those of a foreigner from the 'Scythian' north, and holding the spear in his left hand. With his other characteristic emblem, the bag of gold coins, he appears in other Gandhāra sculptures (see e.g. Grünwedel, *Mythologie des Buddhismus*, p. 23, Fig. 14; the Takht-i-Bāhī relievo in my *Archaeol. Survey Report, Frontier Circle*, 1912, Fig. 2). For four Lokapālas in Gandhāra relievos, cf. Foucher, *Beginnings of Buddhist Art*, pp. 173 sq., Figs. XXVI, XXVII.

[3] Cf. *Ancient Khotan*, i. pp. 251 sqq., Figs. 30, 31; ii. Pl. II.

[4] See *Ancient Khotan*, i. pp. 494 sq., Fig. 67; ii. Pl. XIV, LXXXV.

the development of the type as fixed in them.[5] The time when this type and the worship of the gods that it depicts became popular in Chinese Buddhism can fortunately be determined with approximate accuracy from the rock-carvings of Yün-kang and Lung-mên.[6] Whereas the Lokapālas are conspicuous by their absence in the former, they are found at the latter site represented by sculptures which are proved by inscriptional evidence to have been executed during A.D. 672–75.[7] A comparison of the colossal Lokapāla figures reproduced in certain of M. Chavannes' plates leaves no doubt either about the origin of their type or about its definite adoption by Chinese Buddhist art in the early T'ang period.[8]

Identification of individual Lokapālas.

The fixed uniformity of the type in bodily appearance, attire, and pose on the one hand, and the variations on the other which the attributes of individual Lokapālas appear to have undergone in the course of their long migration from India to Japan,[9] would necessarily raise considerable difficulty about the identification of the particular Demon Kings intended in our numerous paintings. But, fortunately, we are spared all iconographic doubts of this kind by the clear and definite indications with which we are furnished by the pictures to be found in one of the Chinese manuscript texts specially devoted to the worship of the Four Regents.[10] The inscribed cartouches by their side in Ch. xviii. 002, with which the inscriptions found on some of the other paintings are in full agreement, make it quite certain that Vaiśravaṇa, the Regent of the North and, as the god of wealth, also the most prominent of the Lokapālas, is always to be recognized by his pike; Dhṛtarāṣṭra, the ruler of the East, by his bow or arrow; Virūḍhaka, the guardian of the South, by his club; and finally Virūpākṣa, who holds sway in the West, by his bared sword.

Cognizances of Lokapālas.

Leaving aside for the present certain representations of larger size, intended to be hung on walls, which either show Lokapālas attended by their demon followers or else are preserved only as fragments, we find in the numerous banners, as well as in the paper pictures, 'the Four Great Kings' (*Catur-mahārājas*) almost invariably depicted standing on a demon as cognizance, or 'Vāhana'. In these contorted crouching figures I cannot trace any specific indications of the different classes of demigods which the Buddhist mythology of the texts associates with the several Regents.[11] But in one instance we meet with an interesting exception to that general rule. In the banner Ch. 0087 we see a Vaiśravaṇa, marked also by some other peculiar features, resting his feet, not as elsewhere on the prostrate figure of a demon, but on the hands of a fair girl rising with head and breast from a lotus beneath. The girl's face, suggesting Īrānian features, the dress of her hair,

[5] Much of the material yielded by the exploration of the cave-temples, etc., of those northern oases is as yet unpublished, nor are all the publications bearing upon them accessible to me at present. Hence the following brief references to Professor Grünwedel's works must suffice: *Altbuddhistische Kultstätten*, pp. 152, 155, figs. 345, 346 (two fine bearded Lokapāla heads of an early type, among the Kizil wall-paintings); *ibid.* p. 185 (four Lokapālas at Kirish); p. 205, Fig. 460 (L. in interesting armour, from a cave of the Shōrchuk site near Kara-shahr); p. 239, Fig. 512 (at Murtuk, a fine wall-painting evidently representing Dhṛtarāṣṭra and closely resembling our pictures in style); p. 311, fig. 628 (with scene of Garuḍa hunt, as in Ch. 0018). For other representations, see *ibid.* Index, s.v. *Lokapālas*; also *Idikutschari*, p. 63, Pl. XIII. (heads of Lokapāla statues).

See also below, chap. xxix. sec. iii, iv, with Pl. CXXVII, for the fine wooden Lokapāla statuette, Mi. xv. 0031, excavated at the ruined site of Shikchin (Shōrchuk).

[6] Cf. Chavannes, *Mission archéologique*, i. pp. 553 sq.; Planches I, Nos. 353, 356; also Petrucci, *Revue de l'Université de Bruxelles*, 1910, pp. 505 sqq.; *Gazette des Beaux-Arts*, 1911, septembre, p. 206.

[7] Regarding the tradition quoted by M. Petrucci, *loc. cit.*, p. 506 (from Eitel, *Handbook of Chinese Buddhism*, p. 174), which attributes the introduction of the Lokapāla cult into China to Amoghavajra, an Indian monk, who followed Vajra bodhi there in A.D. 719, cf. Chavannes, *Mission archéologique*, i. p. 554.

[8] See Chavannes, *Mission archéologique*, Planches I, Nos. 353, 356, 395, 396.

[9] Cf. Grünwedel-Burgess, *Buddhist Art*, p. 136.

[10] See the fine miniatures in the booklet Ch. xviii. 002, Pl. XC, dated A.D. 890, and the smaller but equally spirited illustrations of the book Ch. xxii. 0026, Pl. XCII.

[11] Cf. Grünwedel-Burgess, *Buddhist Art*, p. 136, where Yakṣas, Kumbhāṇḍas, Nāgas, and Gandharvas are mentioned as the divine hosts ruled by Vaiśravaṇa, Virūḍhaka, Virūpākṣa, and Dhṛtarāṣṭra respectively.

etc., unmistakably recall the type of female beauty which prevails in Khotan paintings and sculptural remains alike. And in striking agreement with this impression we find exactly the same girl busts rising beneath two of the Lokapāla statues which guarded the entrance of the Rawak Vihāra previously referred to.[12]

Female figures supporting Lokapālas.

In discussing these figures I have already called attention to the curious resemblance between them and the female figures which are seen rising singly or in pairs between the feet of Kaṇṭhaka in well-known Gandhāra relievos representing Prince Siddhārtha's escape from his palace.[13] Whatever their interpretation may be—and there is much to support the very ingenious and tempting conjecture of Professor Grünwedel that a representation of the earth-goddess, inspired by a motif of classical art (Gê, Gaia), is intended [14]—there can be no doubt that we have here another clear link between our paintings and that Buddhist art of the Tārīm Basin, and in particular of Khotan, about the influence of which on Buddhist painting in China the historical notice of the activity of the Khotanese painter prince Wei-ch'ih I-sêng has preserved for us so definite and interesting a record.[15]

Groups of Lokapāla banners.

Since the distinct attributes already referred to enable us to identify the individual Lokapālas represented in the various pictures, it will be best to survey them in their iconographic grouping according to subjects. Before, however, proceeding to do so some general observations must be offered.[16] Throughout the Lokapālas are presented as warrior kings, and no distinction of individual Regents is indicated except by the arms that serve as attributes. In the rich dress the warrior's part invariably predominates, being expressed by elaborate defensive armour. It is less in this than in the treatment of physical features and in style generally that two groups can be distinguished among the Lokapāla banners. One of them, for which Miss Lorimer has for convenience sake used the term 'Indian', but which in view of its obvious line of descent can safely be designated as 'Central-Asian', undoubtedly represents an older type. Among its characteristics may be mentioned the entirely human, if sometimes fierce, features; the position always facing the spectator; a certain stiffness of pose and dress.[17] The faces with their generally straight, if sometimes grotesquely opened, eyes show a distinctly non-Chinese type. The long-waisted, slim bodies plainly betray the influence of a foreign and quasi-Īrānian ideal of manly beauty. There are differences also in dress, such as feet shod always in close-fitting shoes instead of the sandals characteristic of the Chinese group; in the haloes, etc.[18] Referring for all details to the Descriptive List I may content myself with emphasizing the fact that the physical type aimed at in the figures of this group is manifestly more Central-Asian and less Chinese than in the other.[19]

'Indian' or 'Central-Asian' type of Lokapāla.

[12] See *Ancient Khotan*, i. 495; ii. Pl. XIV, LXXXV.

[13] Cf. Foucher, *L'art du Gandhâra*, i. pp. 358 sqq.

[14] See Grünwedel-Burgess, *Buddhist Art*, pp. 100 sqq., figs. 51, 52, with M. Foucher's very pertinent observations, *loc. cit.*, i. pp. 358 sq.

I may point out with due reserve that this interpretation of the female figures as the Earth (*Mahāpṛthivī*) may possibly be supported by another exceptional representation among our Lokapāla pictures, that in the illustrations of the manuscript book Ch. xxii. 0026, Pl. XCII. There the Regents are shown standing on island-like pieces of ground, evidently meant to symbolize the quarters of the world that they protect.

[15] Cf. Hirth, *Über fremde Einflüsse in der chinesischen Kunst*, pp. 43 sqq.; *Scraps from a Collector's Notebook*, pp. 70 sqq.

[16] For details of the characteristic features common to all Lokapāla representations in the silk banners, see below, Descriptive List, * Ch. 0010, *General Note*; also introductory remarks under *Ch. 0035 and Ch. xxvi. a. 006.

[17] For illustrations of such figures, see Ch. xxvi. a. 006, Pl. LXXXVII (belonging to the same series as certain 'Indian' Bodhisattva banners); *Ch. 0010, Pl. LXXXIV, which however shows also an influence of Chinese style in some details. Other examples are Ch. 0085, 0087, 00106; xlix. 007, etc.

[18] For details of such distinctions, see below, Descriptive List, Ch. xxvi. a. 006. It deserves to be specially noted that the same distinctions of style appear with constancy in banners forming part of a series; thus e.g. in Ch. xxvi. a. 006; xlix. 007, forming a pair; in *Ch. lv. 004, 005; in Ch. 0022, *0035; xx. 0011.

[19] Besides the non-oblique eyes, attention may be called to the straight, high-bridged noses and the light-coloured (green or blue) iris to be seen in *Ch. 0010; xxvi. a. 001,

'Chinese' type of Lokapāla.

The characteristics of the other group of Lokapāla figures, distinguished by Miss Lorimer as 'Chinese', have been fully indicated in the Descriptive List and can be easily recognized in the available reproductions.[20] Chief among them are the three-quarter profile and sweeping curve of pose; the body thrown out to waist; the freedom and movement imparted to the drawing mainly by the treatment of the flowing drapery; peculiarities in armour and dress, which latter always includes sandals or string-shoes. The invariably oblique cut of the eyes and a distinct tendency towards the grotesque and occasionally even the monstrous are significant for this 'Chinese' group.[21] The character of the style leaves no doubt that this type was developed from the former, or 'Central-Asian', under the impulse of Chinese art feeling; and, considering that all our paintings were the work of Chinese hands, it is only natural that we should find the artistically best Lokapāla representations among this 'Chinese' group.

Armour and dress of Lokapāla figures.

The rich armour and dress with which the Four Kings are always depicted, and the manifold and carefully indicated variations in their details, obviously afford abundant and valuable materials for the study of antiquarian questions such as Dr. Laufer has discussed with much learning and painstaking thoroughness in a recent work, rightly described in its sub-title as *Prolegomena on the history of defensive armour*.[22] But this cannot be the place for any attempt at a general examination of them. I must content myself with referring to Miss Lorimer's descriptive notes on the paintings[23] and with the briefest mention of a few points of special archaeological interest. Attention may be drawn to the valuable indications yielded by the comparison of the elaborate scale-armour of the Four Kings with the actual remains of leather mail from the sites of Niya and Mīrān,[24] or with that represented in stucco relievos found at other Turkestān sites.[25] Without going into any details, such as the different arrangements of overlapping and lacing, I may point out the interesting main fact that the scales shown on the skirt portion of the mail coat are almost invariably oblong and those on the upper part round-edged.[26] I have before had occasion, with reference to the stucco image of Vaiśravaṇa brought to light in one of the Dandān-oilik shrines, to observe that this distinctive arrangement of the scales is found in the armour which two soldiers of Māra's army wear in a well-known Gandhāra relievo.[27] In this connexion it may be noted that chain mail is represented only in a single one of our Lokapāla paintings.[28]

Details of foot-gear.

That the armour and other equipment of the Lokapālas may be safely assumed to reproduce with more or less accuracy those actually in use about the period when the type was evolved seems *a priori* probable. Nevertheless it is a welcome confirmation to find that both the plain sandals

006, xxxvii. 002. Owing to the intermingling of types observed in certain banners, we meet with these last-named features occasionally also in the other group; see e.g. *Ch. 0035 (green iris); lv. 0018, 0046. They have their ethnographic significance and may point to the surviving influence of Central-Asian racial prototypes, probably of the *Homo Alpinus* kind.

[20] See below Descriptive List, *Ch. 0035; also 0040 (Pl. LXXXV); liv. 003 (*Thousand B.*, Pl. XXVIII); xxvi. a. 002 (Pl. LXXXV); lv. 0017, 0018 (Pl. LXXXV), 0020 (Pl. LXXXIV), 0046 (*ibid.*).

[21] This tendency is well brought out by the demonic head in Ch. 0098 (*Thousand B.*, Pl. XLVIII), a fr. from a large painting; see also lv. 0018 (Pl. LXXXV).

[22] See Laufer, *Chinese Clay Figures*, Part I (1914), especially Chap. III–V, pp. 201–305, with many fine illustrations (see e.g. Pl. LXI for the marble plaque of a Lokapāla in armour, closely resembling the figures on our banners and rightly described p. 300 as Virūpākṣa and of the T'ang period).

[23] See below Descriptive List, particularly *Ch. 0010, where the different portions of the armour and accoutrement are systematically described.

[24] See above, pp. 246, 463 sqq.; also *Ancient Khotan*, i. pp. xvi, 411.

[25] For the latter, cf. below, chap. XXIX. sec. iii, iv, and *Ancient Khotan*, i. pp. 252 sq.

[26] See for illustrations particularly Pl. LXXXIV, LXXXV.

[27] Cf. *Ancient Khotan*, i. p. 252, Fig. 30; ii. Pl. II; for a reproduction of the Gandhāra sculpture see, e. g., Grünwedel Burgess, *Buddhist Art*, Fig. 48. For oblong scales throughout, see above, p. 465.

[28] See Ch. liv. 003 (*Thousand B.*, Pl. XXVIII), a fine fragment of a large picture, probably representing Vaiśravaṇa. Dr. Laufer, *Chinese Clay Figures*, I. pp. 237 sqq., assigns Persian origin to chain mail. It is first referred to by Chinese records at the beginning of the seventh century A.D. among tribute from Samarkand; cf. *ibid.* p. 247.

and the shoes woven of cord which are peculiar to the figures of the 'Chinese' group can be matched exactly by relics from the sites of Mīrān, Lou-lan, and the Limes.[29] That the fashion of this foot-gear persisted in actual use for many centuries before and during the T'ang period is a fact conclusively proved by datable finds, and gives no cause for surprise. I must pass by with a mere mention such archaeologically interesting details as the varieties of sword hilts and scabbards or the ornamental lion-heads at the ends of the shoulder-pieces display in certain paintings.[30]

Western-Asiatic style in head-gear.

But special notice is due to the clear evidence which peculiarities of the head-gear worn by the majority of the Lokapālas afford of the influence exercised on their costume by Western-Asiatic taste and style. Whatever form of tiara crowns their head, heavy metal crown or jewel-decked fillet, we see flying up from behind it light streamers rippling in the breeze, and these M. Petrucci had already rightly recognized in Ch. 0018 as borrowed from the characteristic head-dress of Persian kings of the Sassanian period.[31] It appears very probable that the high three-leaved and bejewelled crown which appears on Vaiśravaṇa's head in two fine paintings representing his triumphant progress is also of Persian origin.[32] Another likely loan from Western-Asian art is suggested by the curious emblem of flames which certain paintings show rising from the shoulders of Vaiśravaṇa or Virūpākṣa.[33] But I lack at present the materials for following up this nexus further. That the motif is closely connected with the ancient Iranian worship of the 'royal glory' (*qarenaṅh* in Avesta, the Persian *farr*) can scarcely be doubted.

Vaiśravaṇa's progress with demon host, Ch. 0018.

We may now proceed to the iconographic grouping of our Lokapāla paintings. The place of honour rightly belongs to Vaiśravaṇa; his pre-eminent position is attested by the numerous representations of him, as well as by the fact that in them only we have pictures which show the Protector of the North accompanied by his demon host in triumphant procession. The finest of these is the Kakemono-shaped silk painting Ch. 0018 which Plate LXXII reproduces in colours. It is a work of high artistic merit, clearly from the brush of a master, and fortunately in excellent preservation. It presents the Guardian King as he advances on a cloud across the heaving sea attended by an imposing array, all figures gorgeously attired. Referring for all details to the Descriptive List below and leaving the artistic beauties of composition and colouring to be appreciated elsewhere,[34] I shall note here a few essential iconographic points. The main figure of Vaiśravaṇa, disproportionately large in accordance with a convention already familiar to Graeco-Buddhist as well as to late Hellenistic art, strides ahead carrying the halberd in his right hand and, on a cloud rising from his left, a small shrine. This well-known secondary attribute of the god recurs

[29] Cf. e.g. M. I. ii. 0025 (Pl. L); L. A. VI. ii. 0025 (Pl. XXXVII); T. XIV. a. 002 (Pl. LIV) with Ch. 0022; xx. 0011; lv. 0046 (Pl. LXXXIV).

[30] For the swords carried by Virūpākṣa, see Pl. LXXXIV, LXXXV; for one of archaic shape on Vaiśravaṇa's belt, Ch. 0087. With the lions' heads through the jaws of which Vaiśravaṇa's arms pass in Ch. 0018, 0069, cf. the stucco relievo Mi. xviii. 003, Pl. CXXXVIII.

[31] Cf. Petrucci, *Gazette des Beaux-Arts*, 1911, septembre, p. 200; also *Annales du Musée Guimet*, xli. p. 135.

These floating bands or streamers, well known from the royal figures on Sassanian sculptures and coins, are seen quite clearly behind the Lokapālas' heads in *Ch. 0010, 0018 (Pl. LXXII), 0031, *0035, 0087; xviii. 002 (Pl. XC); xx. 0011; xxxvii. 002 (Pl. LXXIII); liv. 003; lv. 005, 0018 (Pl. LXXXV); 0020 (Pl. LXXXIV), 0046; lxi. 001.

For similar but stiffer bands descending from the head-dress of demon-kings in frescoes of Kum-tura, near Kuchā, cf. Grünwedel, *Altbuddh. Kultstätten*, p. 25, with Figs. 48, 49.

[32] See Ch. 0018 (Pl. LXXII); xxxvii. 002 (Pl. LXXIII).

[33] See Ch. 0018 (Pl. LXXII), 0031, 0087, 00161 (Pl. XCII); xviii. 002 (Pl. XC); xxxvii. 002 (Pl. LXXIII); xlix. 007; lv. 0020 (Pl. LXXXIV).

Cf. for flames rising on the shoulders of a divinity represented on coins of the Arsaco-Indian king Hyrcodes, P. Gardner, *Coins of Greek and Scythic Kings of Bactria*, p. 117, Pl. XXIV, Figs. 8–10. For another interpretation, see Grünwedel, *Altbuddh. Kultstätten*, p. 25, note 1. For many representations of these flames on frescoes of Kuchā, Shōrchuk, etc., cf. Grünwedel, *loc. cit.*, Index, p. 350, *s.v. Flammen*; also p. 22, note 1, for an early instance on a Graeco-Buddhist sculpture.

[34] See below, Descriptive List, pp. 942 sq., and comments on Pl. XLV of *Thousand Buddhas*.

elsewhere also.[35] His *cortège* consists partly of demons, evidently representing Yakṣas, and partly of figures purely human, which are clearly individualized but still await definite identification. Among them is a nymph presenting flowers; a finely painted old man carrying what may be a Vajra, and two male figures in hieratic dress and pose. The fifth is a remarkably well-drawn archer preparing to shoot at a bat-like demon in the air. In the latter we can safely recognize a Garuḍa, the hunting of whom is a frequent motif in Turfān frescoes,[36] and whose winged figure is well known to Gandhāra sculpture.

Legend and emblems of Vaiśravaṇa. Another and larger painting, Ch. xxxvii. 002 (Plate LXXIII),[37] equally spirited in its composition if not so careful in execution, presents to us Vaiśravaṇa riding in rapid progress across the ocean, accompanied by a numerous host. The scene is of special interest because, from the appearance in the foreground of goblins resisting the god's followers and of scattered coins and jewels, it may be assumed to represent the legend of Vaiśravaṇa winning his treasure from the Nāgas. Among other points of archaeological interest duly referred to in the Descriptive List, the elaborate 'horse millinery' of the god's steed may be singled out for mention. In the fragment of a third large picture, Ch. 0069, the attendant clad over head and shoulders with a tiger-skin is of interest because he stands on rolls of coins, emblematic of Vaiśravaṇa or Kubera as the god of Wealth, and carries in his right a mongoose, an attribute of this Lokapāla not elsewhere met with in our paintings.[38] Among the seven silk banners representing Vaiśravaṇa, Ch. 0087 with the curious figure of the god and the girl's bust below and Ch. 0098 with its fine demonic head may be specially noted as characteristic specimens of the 'Central-Asian' and 'Chinese' styles.[39]

Paintings of other Lokapālas. Of the other three Lokapālas, Dhṛtarāṣtra, the Regent of the East, distinguished by bow or arrow, is the only one who is also represented in a large painting, Ch. liv. 003, excellent in drawing and colouring, but unfortunately in fragmentary condition.[40] He appears besides in five banners.[41] Next to Vaiśravaṇa the most frequently portrayed is Virūpākṣa, the ruler of the West, shown with his sword on twelve banners, some of very fine execution.[42] Virūḍhaka, Guardian of the South, appears to have been the least popular with the local donors; for we find him, marked by his club, separately on only two pictures, one of them a silk banner.[43] Finally there remains for mention a silk banner showing a figure of the type and dress of Lokapālas, but without either the demon cognizance or a distinctive attribute.[44]

Dharmapālas or Vajrapāṇis. Along with the Lokapālas we may conveniently notice a small group of silk banners and paper paintings which show us Dharmapālas, or 'Protectors of the Law', and forms of Vajrapāṇi in fury, which are still favourite figures in the Buddhist imagery of the Far East. Derived from the ancient Gandhāra representation of the thunderbolt bearer,[45] they already meet us at Lung-mên. They show there those poses and that exaggerated development of the muscles which remain characteristic

[35] See Ch. 0085; xviii. 002 (Pl. XC).

[36] For references, see Grünwedel, *Altbuddh. Kultstätten,* Index, p. 351, *s.v.* Garuḍa; for an illustration, *ibid.* Fig. 583, p. 282.

[37] For a more successful reproduction on a larger scale, see *Thousand B.*, Pl. XXVI.

[38] For the fragment of a fourth painting, Ch. 0031, representing Vaiśravaṇa with at least one attendant, cf. Descriptive List below, pp. 945 sq.

[39] See for Ch. 0098, *Thousand B.*, Pl. XLVIII. The other banners are Ch. 0085, 00106, 00107, 00117; lxi. 001. Pictures on paper are Ch. 00161 (Pl. XCII), 00405; xxii. 0034.

[40] See *Thousand B.*, Pl. XXVIII.

[41] See Ch. 00468; xxvi. a. 002 (Pl. LXXXV), 006 (Pl. LXXXVII); lv. 005, 0017.

[42] Cf. *Ch. 0010, 0022, *0035, 0040 (Pl. LXXXV; *Thousand B.*, Pl. XXVII), 00469; xx. 0011; xxiii. 001; xxxiv. 004; xlix. 007; lv. 0018 (Pl. LXXXV, carrying Stūpa), 0020, 0046. See also the painting Ch. 00391, mounted on paper.

[43] See Ch. xxvi. a. 001; xvii. 003 (on paper). But cf. also the Lokapāla sets xviii. 002 (Pl. XC); xxii. 0026 (Pl. XCII).

[44] See Ch. 0095 (Pl. LXXXIII). In the fr. of a Lokapāla, Ch. 00470, the attribute is lost.

[45] Cf. Foucher, *L'art du Gandhâra*, i. p. 358; Grünwedel-Burgess, *Buddhist Art*, pp. 93 sqq.; Chavannes, *Mission archéologique*, i. p. 552.

features of the type exhibited by our Dharmapāla figures in a more or less conventionalized form.[46] For tracing the gradual development of this type in Central Asia the frescoes of the northern oases from Kuchā to Turfān are likely to offer abundant materials.[47] Of our own Dharmapāla figures M. Foucher has justly observed that 'they already make us think of the athletic demons of Japan as well as of the frightful lamaistic evocations. Yet it should be noted that they show neither the extravagant multiplication of members nor the monstrous obscenities of the latter.'[48]

Grotesque Dharmapāla type in banners.

The nine silk Dharmapāla banners, all but one in excellent or relatively good preservation, are but slightly distinguished from each other in type, and several are unmistakably replicas.[49] All of them have the muscular figure in tense attitude, the grotesque head with its furious downward look, and the large richly ornamented Vajra representing the thunderbolt. Abundantly decked with jewellery as they are, they carry but scanty dress, no doubt in order to permit full exhibition of the extravagantly exaggerated muscles. The treatment of the latter, if conventionalized, yet shows considerable skill, and its effect is heightened in some banners by clever brushwork intended for modelling.[50] The sinuous lines of the drapery, the fillet ends of the head-dress flying upwards, the coiling clouds above, and in some cases the flames of the halo bursting round the raised arm, all help to intensify the expression of violent effort.[51] With this aim, too, strong and clear colours are used throughout, often with a very striking effect. As a minor point of quasi-ethnographic interest the green irises found in some of these grotesque figures may be mentioned in conclusion.[52] Besides the banners we have the Kakemono-shaped paper painting of a three-headed Vajrapāṇi, Ch. i. 0023, and in Ch. 00156 (Plate XCVIII) spirited pen-and-ink sketches of Vajrapāṇis in different poses.[53]

Section VII.—DIVINE GROUPS AND ASSEMBLAGES

Classification of groups.

We may now proceed to review the paintings of the second main category, which are consecrated to more than one divinity. It will obviously be convenient first to treat of those paintings which present to us two or more chief figures of the Buddhist Pantheon placed side by side in hieratic co-ordination; next to examine those in which we find two or more Bodhisattvas, eventually with their celestial following, grouped round a central Buddha; and finally to approach the elaborate and sumptuous compositions which are meant to bring before our eyes one or another of the Heavens presided over by different Buddhas in all their magnificence of divine hosts and celestial pleasures.

[46] Cf. Chavannes, *Mission archéologique*, Planches I, Nos. 303, 304, 330, 342, 345, 357–60. The violent pose, exaggerated muscles, and the absence of armour help to distinguish these figures from those of Lokapālas; see for the latter particularly No. 353. M. Chavannes sees a Vajrapāṇi in the composite figure of Yün-kang (Nos. 219, 231) with trident and Vajra, which might otherwise be taken for a Lokapāla of an earlier type; cf. *loc. cit.*, i. p. 312.

[47] For reference to numerous representations, some illustrated, cf. Grünwedel, *Altbuddh. Kultstätten*, p. 368, Index *s.v. Vajrapāṇi*; for a Vajrapāṇi figure at Murtuk closely approaching the type on our banners, see *ibid.* p. 309, Fig. 627.

[48] For M. Foucher's notes, see above, p. 833. For the Dharmapālas of Tibetan Buddhism in all their extravagant variations and their connexion with Vajrapāṇi, cf. Grünwedel, *Mythologie des Buddhismus*, pp. 158 sqq.

That the muscular demon figures found as guardians at the entrances of Japanese temples and known as Ni-ô are of the Vajrapāṇi type is quite clear; cf. Grünwedel-Burgess, *Buddhist Art*, p. 95, note 1; for an illustration, see Grünwedel, *Mythologie des B.*, p. xiv.

[49] Cf. Descriptive List for Ch. 004 (Pl. LXXXVI); i. 006; lxi. 006, and the pair Ch. xxiv. 001, 002. Other silk banners are Ch. 00467 (fr.); i. 004 (*Thousand B.*, Pl. XXIX); xxvi. a. 005; liv. 002 (Pl. LXXXVI).

[50] For a good specimen, see Ch. 004, Pl. LXXXVI; also i. 004, *Thousand B.*, Pl. XXIX. This modelling, through mechanical treatment, degenerates into a meaningless network of pink brush-strokes in xxvi. a. 005; lxi. 006.

[51] For these flames bursting upwards, see Ch. xxiv. 001, 002 (Pl. LXXXVI); flaming jewels on the shoulder appear also Ch. xxiv. 001; xxvi. a. 005.

[52] Cf. Ch. xxvi. a. 005; liv. 002.

[53] For a rough paper painting, see Ch. 00409.

Buddha and Bodhisattva sculptures reproduced.

At the head of the first and simplest section we must necessarily place, on account of its exceptional interest, the large but unfortunately poorly preserved silk painting Ch. xxii. 0023.[1] Though in tatters, it attracted attention from the first by the obvious and pure Gandhāra style of the numerous Buddha and Bodhisattva images which it shows arranged in different compartments. But it was reserved for M. Petrucci first to recognize clearly from the few inscriptions still legible on the cartouches adjoining the different figures that they were intended to reproduce sculptured images worshipped at various sacred sites of India. The iconographic importance which this discovery assures to the painting is too clear to need full exposition here. M. Petrucci was fortunately able to emphasize it himself in his Musée Guimet lecture on our paintings,[2] and the very careful account given by Miss Lorimer in the Descriptive List makes it unnecessary for me to go into details. But attention may well be called here to some essential points. The total number of images of which representations are extant or at least partially traceable is eighteen, the original position of thirteen among them being certain. In the case of six the characteristic poses or attributes enable us at present to identify with certainty the particular divinity which the original images were intended to represent. For others further scrutiny by competent iconographers is likely to furnish definite clues.

Image of Buddha of Vajrāsana.

That in figure iv we have the reproduction of an image showing Gautama Bodhisattva, seated in the famous scene of Māra's attack immediately preceding the Illumination, is made quite certain by the characteristic pose of the hand touching the rocky seat (*bhūmisparśa-mudrā*)[3] and by the triple monster head forming a crown over the Bodhisattva's head and symbolizing the demon army of Māra. It was in that pose that the miraculous image at the sacred site of Bōdh-Gayā, known as 'the Vajrāsana of Mahābodhi' described at length by Hsüan-tsang, and still traceable in numberless replicas, presented Śākyamuni at the moment of Enlightenment.[4] And that actually a representation of this far-famed image was here intended in our painting becomes certain from the Chinese inscription placed against it which describes the figure as a statue in the Kingdom of Magadha. Considering that Chinese historical evidence proves the Vajrāsana or the image of the 'true appearance of the Diamond Throne', as the Chinese pilgrims render its name, to have been the most venerated Buddhist idol of India from the seventh to the eleventh century,[5] we have, indeed, every reason to expect its reproduction in our painting. We meet there again with a Bodhisattva image seated cross-legged in the *bhūmisparśa-mudrā*,[6] and this time, too, a fortunate chance has

[1] See Pl. LXX, which reproduces what appears to be a portion of the less damaged left half of the whole picture. For the surviving fragments of the right half as originally recovered, an enlarged inventory photograph is available. In finally mounting the left half, a fragment from the right one was transferred by the Department of Prints and Drawings into the blank space to R. of Fig. v, apparently for aesthetic reasons, as shown by the reproduction in *Thousand B.*, Pl. XIV; see note in Descriptive List, Ch. xxii. 0023.

[2] See Petrucci, *Annales du Musée Guimet*, xli. pp. 121 sqq.

[3] Cf. regarding this gesture, which evolved in Gandhāra becomes the stereotyped symbol in later Indian sculpture for the Attainment of Buddhahood, Foucher, *L'art du Gandhâra*, i. pp. 406 sqq.

[4] Cf. Foucher, *ibid.*, i. pp. 413 sq.; *Iconographie bouddhique*, i. pp. 90 sqq., Fig. 11, Pl. III. 5.

It is of interest to note that, among the miniature representations of sacred structures and images in two Nepālese manuscripts which M. Foucher has described and elucidated in the latter work, there is another one (not reproduced), marked II. 2 and bearing the inscription *Mahābodhi-vajrāsanaḥ*, which just like our figure in Ch. xxii. 0023 combines the *bhūmisparśa-mudrā* of Śākyamuni with a representation of Māra's demons.

[5] Cf. M. Foucher's note on *Le Bouddha inachevé de Bôrô-budur* in *B.É.F.E.O.*, iii. p. 79; also Chavannes, *Les inscriptions chinoises de Bodh-Gayâ*, in *Revue de l'histoire des religions*, xxxiv. pp. 31 sq.

[6] See Petrucci, *Annales du Musée Guimet*, xli. p. 122. I presume that by Kapiśa is rendered the Chinese local name *Chi-pin*, which, judging from the joint evidence of Hsüan-tsang and Wu-k'ung, can safely be placed in the region of Kābul; cf. for detailed references Chavannes, *Turcs occidentaux*, p. 52, note 1. This location seems to me certain in view of the fact that both pilgrims speak of Chia-pi-shih (Kapiśa): Chi-pin as the summer residence of the Kings who ruled, and in the cold season had their headquarters in, Gandhāra. Kābul has always served as the summer residence

saved the accompanying inscription from effacement. According to M. Petrucci's brief explanation it mentions as the original a silver image preserved in the kingdom of Kapiśa.

Buddha in Deer-park and Miracle of Śrāvastī.

Though the help of inscriptions fails us elsewhere, equally clear indications allow us to identify four more of the images represented. Thus in figure xi the introduction of a pair of gazelles or deer into the ogee top of the vesica that surrounds a standing Buddha shows beyond all doubt that an image representing Buddha in the Deer-park of Benares, the scene of the First Sermon, is meant.[7] Figure v is of special interest because it shows a Buddha statue, standing with the right hand raised in the *abhaya-mudrā* and surrounded by an elliptical vesica which is filled with radiating rows of small Buddhas standing in the same pose and visible from the breast upwards. The whole agrees in all details, down to the folds of the drapery, with the two colossal stucco relievo statues which I unearthed in 1901 on the southern corner walls of the great Rawak Vihāra of Khotan.[8] M. Foucher has since proved that these and similar representations on a much smaller scale in Gandhāra relievos are intended to exhibit Śākyamuni in the act of performing the Great Miracle of Śrāvastī.[9] An Avalokiteśvara can be recognized with certainty in the richly adorned standing figure xii that holds the characteristic emblems of the lotus and flask, and the presence by his sides of various small attendant figures may yet lead to the exact identification of the image intended.

Image of Śākyamuni on Gṛdhrakūṭa.

The standing Buddha figure xiii, which follows next in the extant portion of the painting, presents special iconographic interest. Its hieratic pose of peculiar stiffness, the treatment of the drapery, and what remains of the background of speckled rocks permit us to identify the figure with an image showing Śākyamuni on the Gṛdhrakūṭa, or 'Vulture Peak', which is exhibited in striking similarity also by the fine painting Ch. 0059, to be discussed presently, and by the large embroidery picture Ch. 00260.[10] Apart from the indication, quite clear in all three representations, of the rocks which figure in various episodes of Śākyamuni's later years localized by tradition on that famous rocky hill near Rājagṛha or Rājgir,[11] the identification is made absolutely certain by the figure of the vulture which Ch. 0059 shows painted above the grotto. The absence of an inscription makes it unfortunately impossible for us to ascertain where the Indian image which all three representations are intended to reproduce was assumed to be.[12] But the absolute identity of the pose of both hands, and the extraordinarily close resemblance of all details in the treatment of the drapery, hair, dress, etc., leave no possible doubt that all three are replicas from one and the same model.[13] That this was a sculpture in the Graeco-Buddhist style, or one closely affected by it, is

of the rulers who also held the Peshāwar Valley. The identification with Kāfiristān, suggested *Journal asiat.*, 1915, janvier-février, p. 102 by M. Sylvain Lévi, does not find support in geographical facts.

[7] Cf. Foucher, *L'art du Gandhâra*, i. pp. 431 sqq., for Graeco-Buddhist relievos of the First Sermon. It is interesting to note that while in the scene at the top of the vesica Śākyamuni appears seated, as invariably in the Gandhāra relievos, the large Buddha statue below is standing.

[8] Cf. *Ancient Khotan*, i. p. 493, Figs. 62–4; *Ruins of Khotan*, Frontispiece.

[9] Cf. Foucher, *Beginnings of Buddhist Art*, p. 172, with note 1; for other Gandhāra relievos of this type, see my paper on *Excavations at Sahri-Bahlōl*, in *Annual Report, Archaeol. Survey of India*, 1911–12, p. 105, Pl. XLVII, Fig. 19.

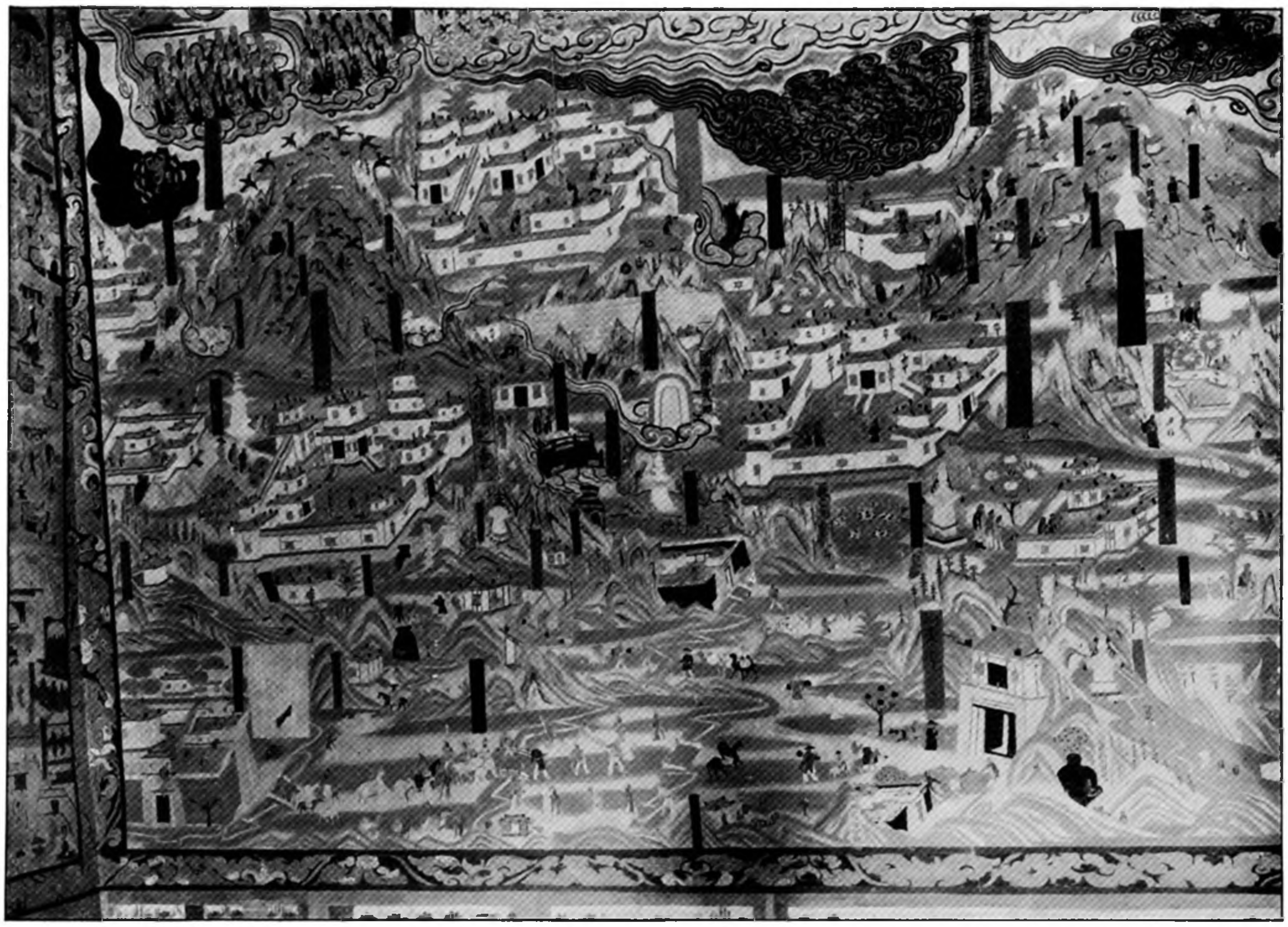
I may add here that the fragment xiv shows a similar vesica filled with small standing Buddha busts round the R. side of a Buddha seated on a throne in European fashion. For another type of vesica showing two rows of small seated Buddhas and enclosing a seated Bodhisattva, see note on figure xvii in Descriptive List.

[10] See for Ch. 0059, *Thousand B.*, Pl. XIII; for the great embroidery picture, Pl. CIV, and below, p. 895 sq.

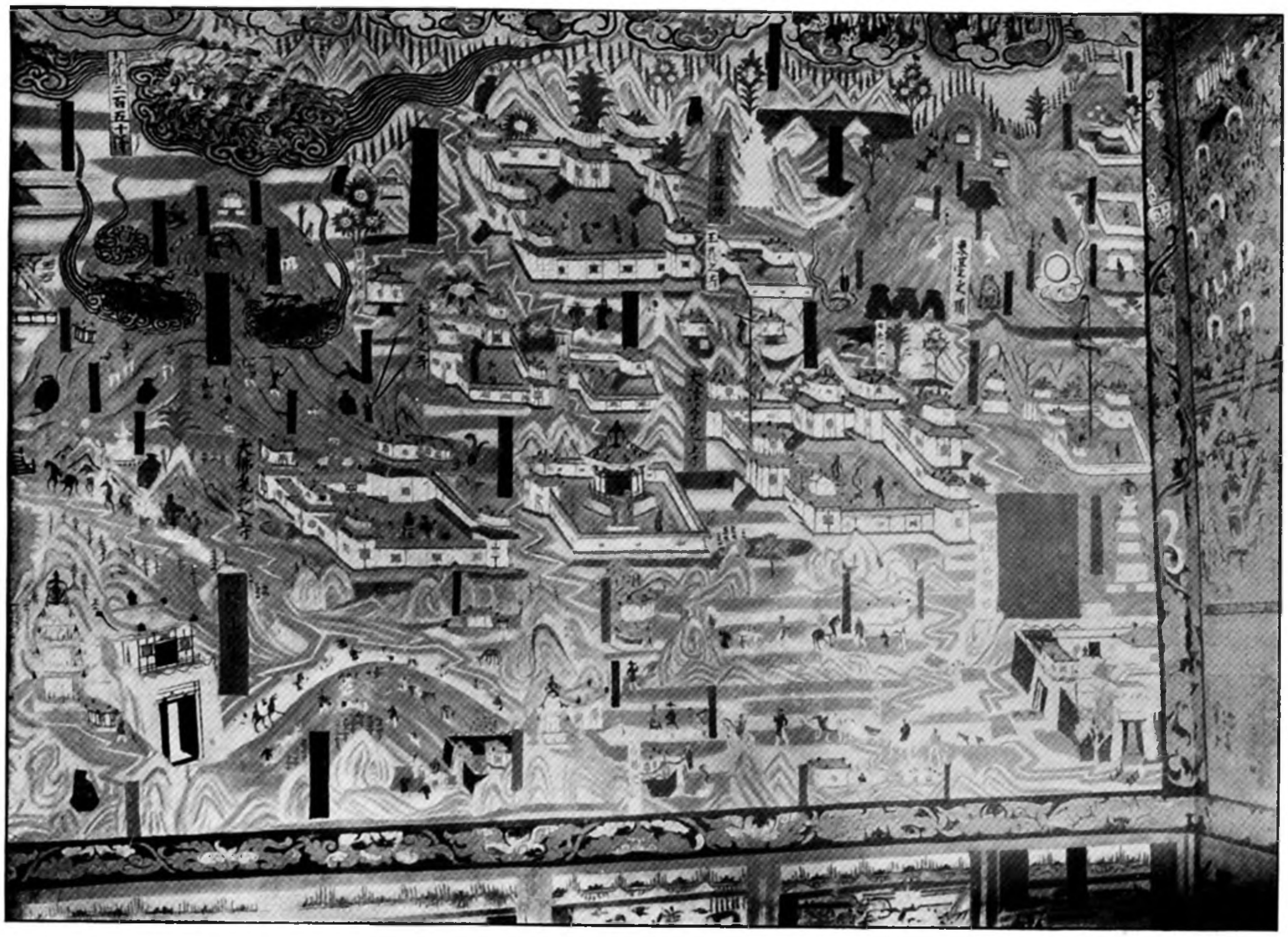
[11] Cf. e.g. Hsüan-tsang's account of the Gṛdhrakūṭa-parvata, Julien, *Mémoires*, ii. pp. 20 sqq.; Beal, *Siyu-ki*, ii. pp. 152 sqq.; Watters, *Yuan Chwang*, ii. pp. 151 sqq., where other references in Chinese Buddhist texts are mentioned. See also Legge, *Fâ-hien*, pp. 82 sq.; Foucher, *L'art du Gandhâra*, i. pp. 497 sq., etc.

[12] Hsüan-tsang's account of the Gṛdhrakūṭa hill, referred to in the last note, mentions a 'life-size image of the Buddha in the attitude of preaching', placed in a hall built close to a cliff where Śākyamuni was believed to have often preached.

[13] It may suffice to draw attention to the complete agreement in the stiff modelling of the R. arm hanging straight down, of its joints, and of the L. hand gathering up drapery at the breast in an 'ear' of identical conventionalized out-

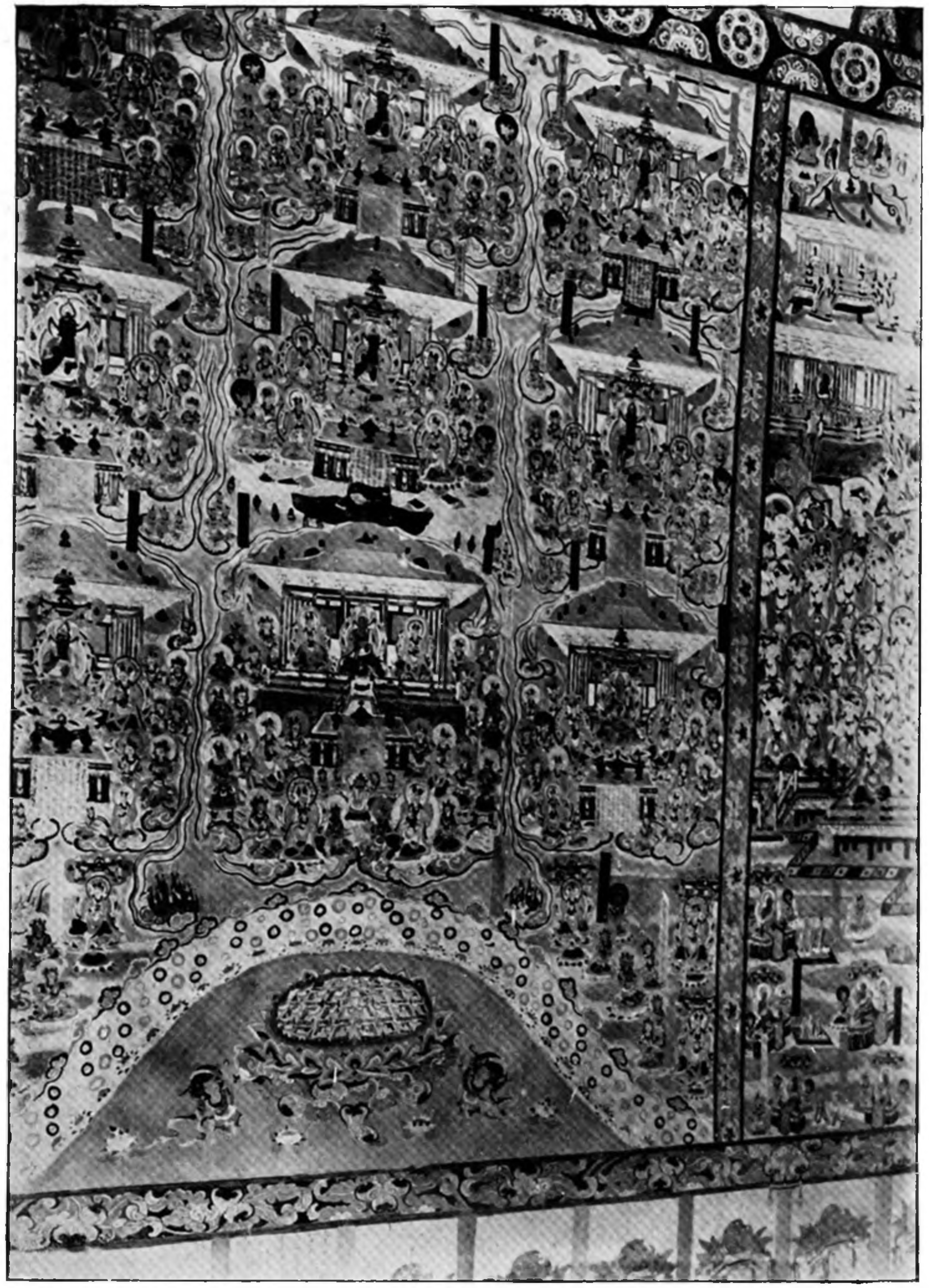


221. WALL PAINTING IN TEMPERA, viii, WITH LEGENDARY SCENES ON WEST WALL OF CELLA IN CAVE VIII, CH'IEN-FO-TUNG.

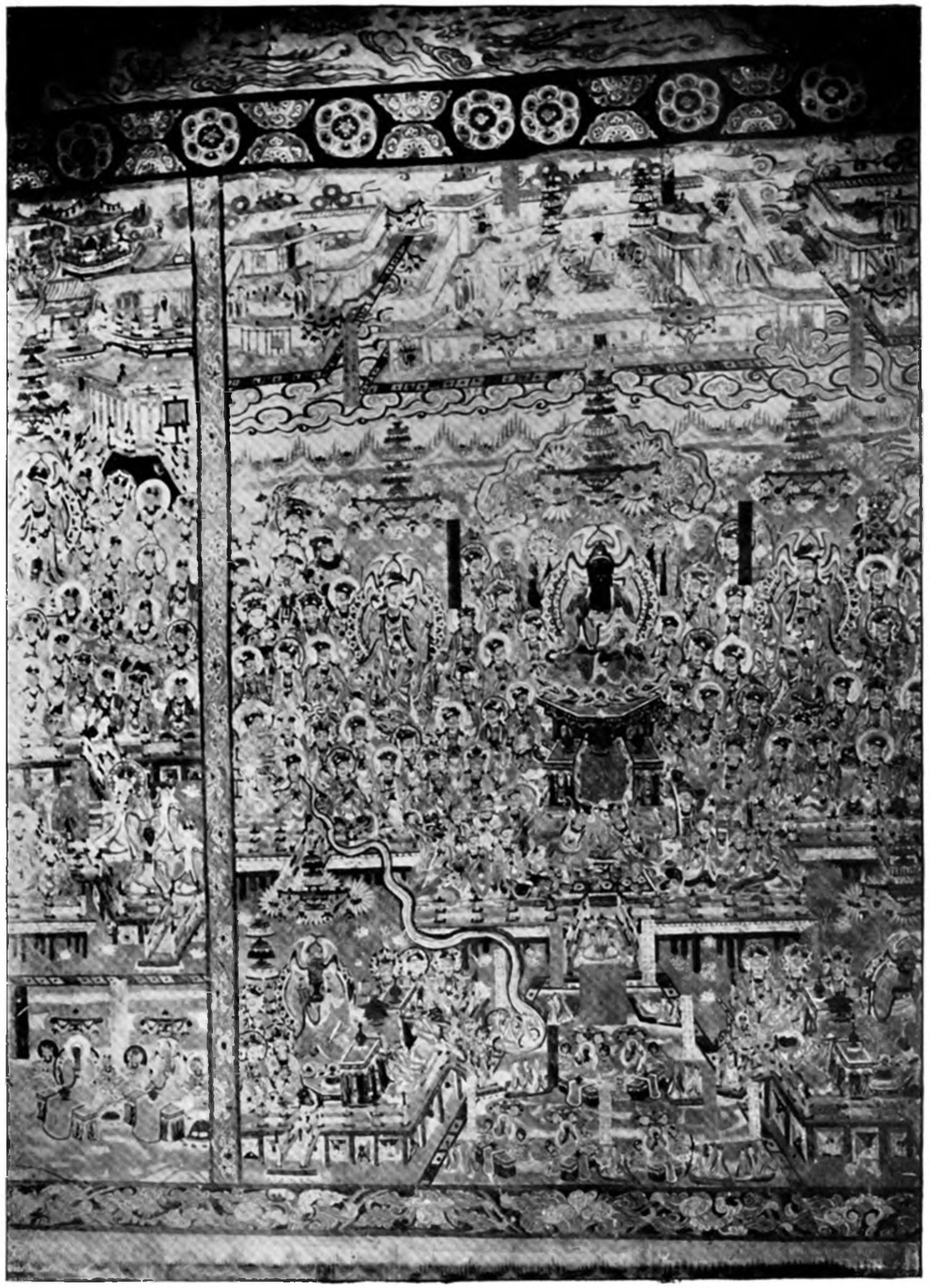


222. WALL PAINTING IN TEMPERA, ix, WITH LEGENDARY SCENES ON WEST WALL OF CELLA IN CAVE VIII, CH'IEN-FO-TUNG.

P. 878



223. PANEL PAINTED IN TEMPERA, xiii, SHOWING DIVINE ASSEMBLAGES, ON NORTH WALL OF CELLA IN CAVE CH. VIII, CH'IEN-FO-TUNG.



224. PANEL PAINTED IN TEMPERA, xi, AND PORTION OF PANEL x, SHOWING SCENES OF WESTERN PARADISE, ON NORTH WALL OF CELLA IN CAVE CH. VIII, CH'IEN-FO-TUNG.

obvious at a glance. But it must be noted that the only Gandhāra sculpture so far known which represents a scene localized on the Vulture Peak shows the Buddha seated in a grotto of the hill.[14]

Images reproduced with hieratic fidelity.

The rigid adherence in details to a common original model which is proved in this particular case may well claim a wider importance. It must help to raise confidence in the general fidelity with which the other figures, too, in our painting Ch. xxii. 0023 may be assumed to reproduce the original images they claim to represent. In this respect we can adduce the evidence of the close parallel presented by the miniatures in certain Nepālese manuscripts of the eleventh century which illustrate, as attached legends show, various sacred images and shrines of Buddhist India. M. Foucher, who has made these miniatures the subject of a most illuminating and fruitful study, has been able conclusively to prove that their painters, in all that concerns such essential points as pose, gesture, colour, and fixed attributes of the principal figures, have always been at pains to reproduce faithfully the stereotyped models furnished by long-continued traditional imagery.[15] Just as little as those Nepālese illuminators was the painter of Ch. xxii. 0023 likely to have allowed scope to what power of invention, if any, he possessed, when he was preparing his album of sacred images. In what form the types thus conventionally reproduced reached him is a question to which our present knowledge does not furnish a definite answer.[16] But the clearly preserved Graeco-Buddhist style suggests that they were indirectly derived from Gandhāra, and early transmission through Central Asia is obviously probable in the case of a Tun-huang painting.[17] There are certain indications, such as the drawing in mere outlines with scarcely any colour, similar to the technique of Khotanese frescoes, and the perished state of whole portions of the silk, which seem to point to the painting being of early date. We shall see that similar observations apply also to the great embroidery picture.

Painting of Śākyamuni on Vulture Peak.

The identity of the central figure with the image of Śākyamuni on the Vulture Peak which we have just examined makes it convenient to turn next to the fine painting Ch. 0059.[18] Unfortunately it has suffered much damage. But what remains of its left half suffices to show the right shoulder and arm of the standing Śākyamuni hanging down in its characteristic stiff gesture, just as displayed by Ch. xxii. 0023 and the embroidery picture. Above the richly decorated vesica we see the background of rocks treated in vigorous brushwork, and perched on their top the vulture which serves as a *lakṣaṇa* for the scene. Referring to the Descriptive List for all minor details, I may note the cleverly drawn figure of a haloed disciple, which may be intended for Śāriputra, full of individual life, standing by the side of the Master, and along the surviving left edge of the painting a succession of small scenes painted throughout in the Chinese style of the Jātaka scenes which, as we shall observe further on, frame the edges of almost all the large compositions representing Buddhist Heavens.

lines. The agreement in minute details of the drapery between Ch. xxii. 0023 and Ch. 00260 is equally striking. It is clearly traceable even in the much-reduced representation of the statue which appears in the side scene, Ch. 0059 (*Thousand B.*, Pl. XIII).

[14] See Foucher, *L'art du Gandhâra*, i. pp. 497 sqq., Fig. 249.

[15] Cf. Foucher, *Iconographie bouddhique*, i. pp. 40 sqq.

[16] Considering the conventional agreement above noticed in all details of the 'Buddha on Gṛdhrakūṭa' pictures, the suggestion hesitatingly thrown out by M. Petrucci (*Annales du Musée Guimet*, xli. p. 122), that the painter of Ch. xxii. 0023 possibly copied his models on a personal pilgrimage to the Indian sites, has little to recommend it.

[17] In this connexion the question may be hazarded whether the votive object aimed at in the painting and its assumed prototypes was not that of securing the religious merit which might have attached to an actual pilgrimage to those distant sacred sites. The conjecture is suggested by the corresponding and very tempting explanation which M. Foucher has proposed for the widely spread Indian custom of representing, on the four sides of small Stūpa bases or of stēlēs, the four great events in the Buddha's Life-story, localized at Kapilavastu, Gayā, Benares, and Kuśinagara respectively; cf. *L'art du Gandhâra*, i. p. 411.

[18] For a large-scale reproduction, see *Thousand B.*, Pl. XIII.

Representation of legendary scenes.

None of these scenes have as yet been identified. But two of them must immediately claim our attention, even though no interpretation can be attempted at present. In the top scene we see what obviously is a miniature reproduction of the central Buddha image, rising on an open lotus pedestal outside what appears to be meant for a shrine, and with a monk's figure pointing towards it as if to call to it the attention of passers-by shown below. Separated from this scene by another which need not detain us here, we see the Thunder-god above in furious movement surrounded by clouds, and underneath them a small but clearly recognizable replica of the central Buddha image, with the characteristic background of rocks. But what is of particular interest to note is the substantial timber scaffolding which encloses the statue to the height of the shoulders. Perched behind on the scaffolding two workers appear to be busy on the Buddha's head, while below and behind a partially broken building or enclosure a man is seen endeavouring to attract their attention. Even without a clue to the exact interpretation of the side scenes it seems difficult to resist the inference that we have some legend in which the miraculous translation of a sacred statue representing the Buddha on the Vulture Peak played a conspicuous part.[19] But where this evidently famous statue was originally placed and where it was supposed to have miraculously made its subsequent appearance remains so far hidden. Whatever the explanation of the legend may be, it is instructive to observe the strong contrast between the careful reproduction of the stiff hieratic features of the image and the artistic freedom in the rest of the picture, full of life and vigour.

Painting of pair of Avalokiteśvaras.

Among the paintings which show divinities in simple co-ordination we may mention first the large and excellently preserved picture Ch. xxxviii. 005.[20] It presents two almost life-size figures of Avalokiteśvara facing each other, and is painted with great care and high artistic feeling in the style to which, when dealing above with representations of single Bodhisattvas, we have applied the term 'Chinese'. For details of the figures and their rich attire painted in a wealth of harmonious colours, reference to the reproduction in colours and the Descriptive List must suffice. The flower carried by the figure on the left and the flask and willow sprig in the hands of the other are well-known attributes of Avalokiteśvara. Which of the many particular forms of this favourite Bodhisattva of Chinese Buddhism are intended may be determined from the inscribed cartouche above, of which no translation is as yet available. We have a similar pair, probably also of Avalokiteśvaras in 'Chinese' style, in the much-damaged silk painting Ch. lxi. 0010.

Painting of four Avalokiteśvaras, A.D. 864.

The well-preserved large silk painting Ch. lv. 0023 offers special interest.[21] It is the oldest exactly dated painting in the collection, the dedicatory inscription indicating the year A.D. 864. It also combines in a curious fashion hieratic tradition of Indian origin, as displayed in the row of four Avalokiteśvara figures ranged stiffly side by side in the upper half, with the far more spirited treatment of Bodhisattvas in 'Chinese' style in the lower half. There the Bodhisattvas Samantabhadra and Mañjuśrī are represented in procession on their respective 'Vāhanas', the white elephant and the lion, and with their attendants. The combination of these two Bodhisattvas into a pair is typical in our paintings, and illustrated also by a number of frescoes in the cave-shrines of the

[19] Legends of Buddha statues miraculously carried through the air are well attested for the Khotan region by Chinese pilgrims. Thus Hsüan-tsang was shown at a site close to the Khotan capital the statue of a standing Buddha which was believed to have miraculously come to this spot from Kuchā; cf. Julien, *Mémoires*, ii. p. 230; for the identification of the locality, *Ancient Khotan*, i. p. 225. Another famous statue of a standing Buddha, carved in sandal-wood, which was believed to have been made by King Udayana of Kauśambī, and to have come through the air, was worshipped at Pi-mo, east of Khotan, where both Hsüan-tsang and Sung Yün saw it; see Julien, *Mémoires*, ii. pp. 242 sq.; Chavannes, *Voyage de Song Yun*, p. 14. Its location and the divers miraculous stories related about it have been fully discussed, *Ancient Khotan*, i. pp. 455 sq.

[20] See Pl. LXXXI, and for a very successful reproduction in colours, *Thousand B.*, Pl. XV.

[21] See *Desert Cathay*, ii. Pl. VIII, for a reproduction in colour, and *Thousand B.*, Pl. XVI, for one, on a more adequate scale, in monotone.

northern oases of the Tārīm Basin and at Turfān.[22] The symmetrical juxtaposition face to face of their figures and of their respective *parivāras* foreshadows as it were the most characteristic and unvarying feature of the large Maṇḍala compositions, which are to be noticed presently. In contrast to these two Bodhisattvas, always easily identified, only the short Chinese inscriptions by the side of the four Avalokiteśvaras above could tell us which of the many forms of this most popular Bodhisattva is to be recognized in each figure, all being practically alike in pose and dress except for some minor differences noted in the Descriptive List. In artistic merit this picture, in spite of its careful workmanship and rich colour-scheme, cannot rank equal with the majority of the large Maṇḍalas or with other representations of the Bodhisattva pair in procession which will be presently noted. Yet two observations invest it with distinct iconographic and antiquarian value. On the one hand, the sure manner in which the figures of the lower half are presented proves that by the middle of the ninth century the conventions of the 'Chinese' Bodhisattva type peculiar to so many fine silk paintings of our collection were already fully established. On the other, we can derive chronologically useful indications from the fashions of dress, coiffure, etc., which the figures of the donors and donatrices below display, and which in this case can be exactly dated.

Processions of Samantabhadra and Mañjuśrī.

Identity of the principal subjects makes it convenient to mention here some remarkable paintings which, if completely preserved, would, no doubt, have found their place more appropriately among the Paradise Maṇḍalas. They show us processions of Mañjuśrī and Samantabhadra advancing towards a central figure, now lost, which must have represented in all probability a Buddha. In Ch. xxxvii. 003 and 005 we see two large side-pieces, having curved tops and, even in their broken state, a height of over seven feet; they once must have formed part of one arch-shaped picture of still greater size.[23] The two chief Bodhisattvas, mounted on their respective 'Vāhanas', are surrounded by a gorgeous retinue of attendant Bodhisattvas, Lokapālas, and other celestial followers, while a dark-skinned Indian attendant leads the mount of either, preceded by a pair of musicians. Arranged throughout in close conformity with the symmetrical plan of the Maṇḍalas, the big picture in its extant parts shows fine qualities both of drawing and of colouring, and still retains the effect of an impressive composition. Its arched shape suggests that it may have been intended to be hung against the back of some alcove-like rock-carved chapel or against the top part of the side wall in an antechapel.

The large fragment Ch. iii. 006, showing the progress of Mañjuśrī and his *cortège* in exactly corresponding arrangement, must have belonged to another big picture intended for a similar position. The same is proved by the curved edge for the smaller fragment Ch. xxviii. 002 (Plate LXXVI), in which the flight of two phoenixes, floating clouds, and a nymph, probably meant for an Apsaras rising from them, are painted with much freedom and boldness conveying rapid movement. The roughness of certain details, especially in the foreshortened limbs of the nymph, leaves no doubt that the painter intended his work to be viewed at a distance and high above the spectator.

Mañjuśrī, Samantabhadra in Avalokiteśvara's Maṇḍala.

It is only the prominent place occupied by the procession of Mañjuśrī and Samantabhadra in Ch. xxxvii. 004[24] which may justify my referring here to this remarkably fine remnant of what evidently was a large painting representing a Maṇḍala of Avalokiteśvara. Of the great central figure, a 'Thousand-armed' form of this Bodhisattva, only the bust remains, and even less of the two large Bodhisattvas flanking it. Above these we see Mañjuśrī and Samantabhadra advancing from either side towards the centre with a numerous following in solemn array. A large panel, bearing an

[22] Cf. Grünwedel, *Altbuddh. Kultstätten*, pp. 6, 30, 276, 283, 292, 297, 300, 305, 311.

[23] The better-preserved R. side-piece, Ch. xxxvii. 003, is reproduced as a whole in *Thousand B.*, Pl. IV; Pl. V of the same shows on a larger scale the fine group of musicians advancing before Samantabhadra in xxxvii. 005.

[24] See Pl. LIX and, for a reproduction in colour of the left upper portion of the painting, *Thousand B.*, Pl. III.

inscription, no longer legible, in Chinese and Tibetan, separates the two processions. On the top part of the extant painting there is shown Śākyamuni seated, holding the alms-bowl in his left hand and with his right raised in the *vitarka-mudrā*. On either side is seated a large Bodhisattva, painted in the hieratic 'Indian' style and in an Indian pose, while a great assembly composed of aged disciples and lesser Bodhisattvas, the latter of the 'Chinese' type, surrounds the principal figures. For all details of this noble picture, which by fine composition, colours, and workmanship alike claims a high place in the collection, a reference to the Descriptive List must suffice.

Groups of Buddha with Bodhisattvas.

We can now proceed to those simpler representations of divine assemblages which show two or more deities symmetrically grouped around a central figure, and which provide a suitable transition to the elaborate 'Paradise' paintings. Thus in Ch. 0067 we have Amitābha Buddha standing between Avalokiteśvara and Mahāsthāma, a well-known triad of Mahāyāna Buddhism,[25] all three figures in due hieratic pose and of 'Indian' style. Another silk painting of the same stiff disposition, and probably showing the same Buddha and Bodhisattvas, is Ch. xx. 003. Of similar type in arrangement are Ch. 00224, a poorly executed silk painting dated A.D. 939, showing Bhaiṣajyaguru[25a] between Mañjuśrī and Samantabhadra, the last two in 'Chinese' style, and Ch. xxi. 002, a badly preserved picture where the flanking Bodhisattvas are probably the same, but not identified by inscriptions.[26] In the paper painting Ch. xxi. 0015 Bhaiṣajyabuddha appears between Avalokiteśvara and Vajragarbha.

Other divine assemblies.

A somewhat enlarged scheme is presented by the relatively well-preserved painting Ch. xxxiii. 001. It shows us a Buddha in the centre, probably Śākyamuni, surrounded by symmetrically disposed Bodhisattvas, and two disciples whom Chinese inscriptions make it possible to identify as Maudgalyāyana and Śāriputra. In Ch. 0074 we see a Bodhisattva, evidently Avalokiteśvara, seated behind an altar, while around him are ranged four seated Bodhisattvas whom Tibetan inscriptions identify with Samantabhadra and Mañjuśrī, Sarvanivaraṇaviṣkambhin and Kṣitigarbha. It only remains in this group of paintings to mention the fragment, Ch. 00222, of what was undoubtedly a large Maṇḍala, but which in its surviving parts lacks such typical features of the *Sukhāvatī*, or 'Western Paradise', pictures as the lake, the celestial music, and dancing, etc. The badly damaged condition of the silk painting, of which only the original width, over four feet, is certain, does not permit the determination of the central Buddha figure. By its side we find ranged in strict symmetry, besides two chief Bodhisattvas within vesicas, a large assembly of divine beings, including twelve minor Bodhisattvas, the Ten Kings, and six shaven monks whom their haloes mark as Arhats. With this large array of celestial figures the fragment, indifferent as its artistic execution is, may serve as a fit prelude to the series of big compositions to be discussed in the following section.

Section VIII.—PICTURES OF BUDDHIST HEAVENS

Interest of Paradise paintings.

The group of large and elaborate paintings representing the Paradise of Amitābha, and less frequently other Buddhist Heavens, in various respects forms a specially interesting and important portion of our collection. The questions that they raise for the iconography and history of Buddhist

[25] Cf. e.g. Grünwedel-Burgess, *Buddhist Art*, pp. 183, 193 note, 194 note, etc.

For a fr. of a paper painting, showing Avalokiteśvara by the side of a Buddha, probably Amitābha, see Ch. xxviii. 005.

[25a] [But see below, Appendix *E*, II, Mr. Waley's note on Ch. 00224.]

[26] This seems the best place for making brief reference also to Ch. xxii. 0017, a poorly preserved painting on closely woven linen, where a seated central Avalokiteśvara is flanked by two Bodhisattvas that are but little smaller in size, and his Dhyāni-buddha above by two more Bodhisattvas. The figures, purely 'Indian' in style, are all scattered without any attempt at grouping.

Another linen painting, Ch. 00132, of large size but badly effaced, represents a Buddha with attending Bodhisattvas. For a paper painting with a similar group, see Ch. 00160 (Pl. XCII).

art in the Far East are many and often intricate. It is hence particularly fortunate that a considerable number of these paintings, on account of their explanatory inscriptions or for other reasons, have been made the subject of expert investigations by MM. Petrucci and Chavannes. But the results, which were to be published partly in M. Petrucci's Appendix and partly in their joint volume in the *Mémoires concernant l'Asie Orientale*, are not at present accessible to me.[1] These considerations will explain the brevity of the general observations to be offered here, and will help to excuse also if points of interest are passed over or perhaps wrongly interpreted. On the other hand, I hope that the very careful and detailed description which Miss Lorimer has given of each individual picture will facilitate further study by specially qualified experts, like those in Japan, who may not be in a position to examine the originals.

'Western Paradise' of Buddha Amitābha.

The importance which the conception of a heaven of bliss, the 'Western Paradise' or *Sukhāvatī*, presided over by the Buddha Amitābha has acquired in Northern Buddhism, and especially in that of China and Japan, is a fact too well known to require specially to be emphasized or attested.[1a] Nor are we concerned here with its origin and development. It is obvious how attractive for the Chinese mind, so intensely attached at all periods to the comforts and sensible enjoyment of the realities of life, must have been the idea of a Paradise where the souls of believers in the Law may be reborn, free from all taint, in the buds of its lotus-lake to enjoy thereafter for aeons, or in popular belief for ever, blissful rest and pleasures in the company of a host of celestial beings.[1b] The representations of Amitābha's Paradise of the West which abound in Japanese Buddhist painting are believed to be all derived, directly or indirectly, from a Chinese original introduced in the eighth century and still extant in the Taïma-ji temple.[2] M. Petrucci has also pointed out that this early prototype exhibits the very arrangement, characteristic, as we shall see, of the great majority of our paintings of Amitābha's Paradise, showing the Sukhāvatī scene in the middle, and on either side of it, in marginal bands, a succession of small scenes illustrating episodes of the legend of Ajātaśatru and Bimbisāra connected with Śākyamuni's life. The same arrangement is also found equally well defined in certain of the Ch'ien-fo-tung wall-paintings.[3]

Central-Asian development of scheme.

It is clear that this identical rule of composition points to the scheme having been fully established long before any of these representations were produced, and its conformity in all details with the text of the *Amitāyurdhyāna-sūtra*, upon which all the scenes evidently are based,[4] supports the same conclusion. That the preceding development of the scheme took place at least partly in Central-Asian Buddhist art suggests itself *a priori* as probable. But if we are not as yet in a position actually to trace it in that region,[5] there is instead an important piece of literary evidence which M. Petrucci quotes from the *Li tai ming hua chi*. According to this text a Sukhāvatī fresco was painted in the eastern capital of the Sui dynasty by the Khotanese painter Wei-ch'ih Po-chih-na, who had been drawn to the Imperial court in the period A.D. 605–17.[6]

[1] [But see now Petrucci, *Essai sur les Mandalas*, in Appendix *E*, III.]

[1a] Cf. e.g. Grünwedel, *Mythologie des Buddhismus*, pp. 115 sqq.; Eitel, *Handbook of Chinese Buddhism*, pp. 6 sq.; Edkins, *Chinese Buddhism*, pp. 233 sqq.

[1b] For an interesting and vivid presentation of Chinese popular notions on the subject, cf. the legend quoted from Schott's translation (1846) by Grünwedel, *Mythologie des Buddhismus*, pp. 116 sqq.; Yule, *Marco Polo*, i. p. 460.

[2] Cf. Petrucci, *Annales du Musée Guimet*, xli. p. 125.

[3] See below, p. 930. [4] See below, p. 886, note 15.

[5] All Sukhāvatī representations that have so far been clearly identified among Turkestān wall-paintings (cf. Grünwedel, *Altbuddh. Kultstätten*, Index, s.v. Sukhāvatī for references) seem all to belong to Turfān shrines of the Uigur period, the decorations of which manifestly reflect strong local influence of contemporary Chinese Buddhist art.

[6] Cf. Petrucci, *Annales du Musée Guimet*, xli. p. 126. Regarding the *Li tai ming hua chi*, a history of Chinese art, composed in the ninth century by Chang Yen-yüan, cf. Hirth, *Fremde Einflüsse in der chines. Kunst*, p. 35. It is Professor Hirth's special merit to have first drawn attention to the significant part played in the history of Chinese art by Wei-ch'ih Po-chih-na and his still more famous son, Wei-ch'ih I-sêng; cf. *Fremde Einflüsse*, pp. 34–47; *Scraps from a Collector's Notebook*, pp. 64, 70 sqq. For the name

Simplified representations of *Sukhāvatī*.

What the exact relation between this work, which is, no doubt, of Central-Asian type, and the ancient Japanese prototype on the one hand and our Sukhāvatī paintings on the other may have been I am not in a position to investigate. But so much is certain that among the latter we find more than one type represented. By the side of the numerous class referred to above, which presents to us Amitābha's Heaven in a very sumptuous setting, filled with a gorgeous host of Bodhisattvas and minor divinities of all kinds and enclosed between rows of legendary scenes, we have also representations of a far more simple character. At the close of the preceding section I have already had occasion to mention several pictures in which Amitābha appears flanked by Avalokiteśvara and Mahāsthāma, these Bodhisattvas making up the triad typical of Amitābha's Paradise. From these the transition is easy to a small but interesting group of paintings which show us the chief figures of this Buddha's divine assembly arranged in the characteristic Sukhāvatī fashion, but lacking the vivid scene of heavenly life and enjoyment which forms so prominent a feature in the large Paradise compositions.

Sukhāvatī paintings of 10th cent.

Thus in Ch. xlvi. 008, a silk painting dated A.D. 952, we see Amitābha seated on a railed terrace rising above a lake just as in the last-named pictures. But the personnel is here restricted to six Bodhisattvas and the four Lokapālas ranged symmetrically around the Buddha, neither the celestial orchestra and dancer nor the new-born souls finding a place in the picture. The carefully painted donor figures below furnish accurately datable illustrations of contemporary dress and coiffure in the tenth century. None of the Paradise pictures proper bear dates, a result probably of the damage which the lowest part of these big silk hangings has almost invariably undergone. But in a few at least portions of the donor figures have survived, and a comparison of the dress worn by these as well as by the figures in the side-scenes may yet furnish help towards an approximate dating.[7] The large painting Ch. lii. 004 (Plate LXII) in its upper half shows the typical group of a Paradise picture, with Amitābha flanked by Avalokiteśvara and Mahāsthāma and attended also by two minor Bodhisattvas and by one Lokapāla and disciple on either side. The altar with offerings in front of, and the pair of trees behind, Amitābha are characteristic features in Sukhāvatī pictures. In the lower half scenes of parental devotion are represented, the dress being that of the tenth century, as comparison with the donor figures at the bottom and in the last-named painting shows.

Peculiarities of style in Ch. liii. 001, xlvii. 001.

We have a very instructive pair of paintings, one being probably of older date, in Ch. liii. 001 and Ch. xlvii. 001. Their close interrelation is proved by a number of marked peculiarities in style, composition, colour, treatment, etc., for the details of which reference to the Descriptive List may suffice here.[8] In Ch. liii. 001, which Plate X, *Thousand Buddhas*, successfully reproduces in colours, we see Amitābha enthroned on a lotus between Avalokiteśvara and Mahāsthāma, with two lesser Bodhisattvas in front and a row of six well-individualized disciples behind. No lake is represented; but the general disposition of the figures and such details as the two star-leaved trees supporting a gorgeous floral canopy above Amitābha leave no doubt that a representation of this Buddha's

Wei-ch'ih borne by the ruling family of Khotan during the T'ang period, cf. also *Ancient Khotan*, i. pp. 173, 523 n.

[7] See below, pp. 885, 887 sq., 890.

Ch. xlvi. 008 closely agrees in arrangement and style with the linen painting Ch. i. 0014, which shows a Buddha with four Bodhisattvas seated under trees and around what looks like a terrace translated into an altar. The execution is rough. The donors below wear tenth-century costume.

[8] Cf. below, chap. XII. sec. ii. It may be specially noted that the modelling of the flesh is indicated by high lights in white, in addition to the usual shading in colour tints. This method, reminiscent of the technique in the Mīrān angel frescoes from M. III (see above, p. 504), is nowhere else found among our Ch'ien-fo-tung paintings. Other distinguishing common features in the treatment of details are, e.g., the transparency of the haloes (not found in other Paradise pictures), the panel provided for the votive inscription in the shape of a stone slab, the Apsaras figures sweeping down by the side of the central floral canopy. As regards the identical peculiarities in the donors' costumes, see below, p. 885, with note 10.

Heaven is intended. This we find fully developed in Ch. xlvii. 001,[9] a large and complete picture over five feet square. It shows us Amitābha and his two chief Bodhisattvas on lotus thrones rising from the Sukhāvatī lake, and in the foreground a large terrace occupied by representatives of the various celestial beings, including pure souls reborn as infants, sacred birds, etc., characteristic of the main class of Paradise pictures. Oval lotus buds enveloping infant souls, and accompanied by inscriptions which describe the state of rest enjoyed by the soul in its new life, rise at the back of the terrace. Above in the air appear small Buddhas descending on clouds, floating infant souls, graceful Apsaras figures by the side of the central canopy, musical instruments—all forming part of the familiar *tableau* presented by the typical Paradise paintings.

Yet striking differences of composition, such as the total absence of the celestial mansions in the background and the ample spacing of the principal figures, make it equally certain that we have here preserved a specimen of a Sukhāvatī scheme developed quite independently of the orthodox type which predominates among the Ch'ien-fo-tung paintings and frescoes, and which has become stereotyped in Japan. It is hence of special interest to observe that the costume of the donors in Ch. xlvii. 001; liii. 001 is markedly different from that seen in all dated tenth-century paintings and manifestly older also than that seen in the picture Ch. lv. 0023, of A.D. 864, already discussed.[10] The characteristic features of the dress—the small tailed cap and long belted coat in the case of the men and the plain hair knot and narrow-sleeved bodice in that of the ladies—appear with still greater clearness in the donor figures of the large embroidery picture, Ch. 00260 (Plate CIV). This last shares some of the other peculiarities of our two paintings,[11] and may on the strength of this evidence be attributed to approximately the same period. A relatively early date seems to be indicated for all three pictures also by the previously discussed fact that the costume of their donors bears close resemblance to the quasi-archaic dress and coiffure in the scenes from Śākyamuni's life, as presented by the banners, and also to that in certain Yün-kang and Lung-mên relievos.[12]

Independent *Sukhāvatī* scheme.

Donors' costume suggests earlier date.

The type which as early as T'ang times must have become predominant for the representation of Amitābha's Paradise is illustrated in our collection by more than a dozen paintings.[13] Owing to the large surface needed for such a host of figures, the majority of the pictures in this series have suffered much damage, while a few are reduced to mere fragments. But some are in fair preservation, and the abundance of materials permits all features common to the type to be determined with certainty. For a detailed account of these Miss Lorimer's careful notes in the Descriptive List may be consulted.[14] Here it must suffice to draw attention to the essential points. The explanations kindly furnished by a competent Japanese expert, Mr. Yabuki, who in 1916 studied these and other large compositions in our collection, make it clear that the paintings of this series are intended

Predominant type of *Sukhāvatī* paintings.

[9] See *Thousand B.*, Pl. XI.

[10] See above, pp. 880. For a list of the dated paintings that show figures of donors, see above, p. 850, note 23. Ch. lv. 0023 (*Desert Cathay*, ii. Pl. VIII) agrees closely with Ch. xx. 005, of A.D. 891, the head-dress of the men and the coiffure of the ladies showing in both a preliminary stage, as it were, towards the characteristic stiff, wide-flapped hats of the men and the highly ornate head-gear of the ladies displayed in all our tenth-century paintings.

[11] Such are, apart from the dress, etc., of the donors, the Apsaras figures with boldly looped scarves sweeping *down* by the side of the canopy; the brocaded edges of the lower robes of the principal Bodhisattvas (see Ch. liii. 001, *Thousand B.*, Pl. X); the sage-green seed-beds of the lotus pedestals; the naturalistic treatment of the disciples' heads (as in Ch. liii. 001). Cf. below, p. 896.

[12] See above, p. 851.

[13] They are: *Ch. 0051, 00104, 00216 (portions reproduced in *Thousand B.*, Pl. XXX); v. 001; xxxiii. 003; liii. 003; lv. 0033, 0047 (see *J. of Indian Art*, N.S., No. 120, Pl. 4); lviii. 0011 (*Thousand B.*, Pl. VIII). To these must be added the fragments Ch. 00457; iv. 001; xxii. 009; and lvi. 0018, 0034, showing the Paradise of Amitāyus (see below, p. 888). For miscellaneous frs., probably from similar pictures, see Ch. 00473. a–e; xxii. 005–007, xxxviii. 006. Ch. lviii. 006 is a painting of this class, left in the shape of a rolled-up bundle as found in the walled-up chapel.

The best-preserved specimens are *Ch. 0051, which has also retained the side-scenes, and Ch. lviii. 0011. The reproduction of the last in *Thousand B.*, Pl. VIII, will serve best to illustrate the descriptive remarks made in the text below.

[14] See particularly *Ch. 0051, *General Note*, and *Ch. lii. 003.

to illustrate the Western Paradise as described in the *Amitāyurdhyāna-sūtra* as well as the legends and meditations connected with it which are treated in this very popular work.[15] This explains the regular appearance on the sides of these paintings, wherever their lateral edges are preserved, of scenes belonging to identical cycles.

Legend of Bimbisāra and Vaidehī in side-scenes.

Arranged in quasi-predella fashion, those on one side illustrate successive episodes of the well-known legend, connected with Śākyamuni's life as a Teacher, of King Bimbisāra and his wicked heir Ajātaśatru, which is related in the first part of the Sūtra. On the other are represented the meditations of Bimbisāra's Queen Vaidehī on different objects in the Paradise of Amitābha, as set forth in the second part of the text. The few remarks for which space can be spared here, on points of iconographic interest in these side-scenes, may as well be offered at once. The legendary subjects are treated entirely in Chinese secular style, just as in the banners with scenes from Śākyamuni's life. The observations made above concerning the costume of the figures appearing in the latter apply equally to the side-scenes in our Amitābha Paradise pictures. Those which represent movement usually show vigorous drawing, while the scenes illustrating Vaidehī's meditations necessarily suffer from monotony and the Queen's motionless pose.[16] Among particular scenes two may be singled out for special mention as relating directly to Gautama Buddha. One shows him as the white rabbit of a well-known Jātaka story, offering himself to a hunter to save him from starvation.[17] In the other he is seen rising with the upper part of his body behind a hill as he presented himself on Mount Gṛdhrakūṭa from a distance to encourage King Bimbisāra in captivity. The latter scene is of importance, as a competent Japanese critic has traced back to it a famous subject of Buddhist art in Japan, the so-called Yamagoshi-Amida.[18]

Jātaka story of white rabbit.

Host of celestial attendants.

If we turn now from the simplicity of these side-scenes with their few figures and general bareness to the Sukhāvatī representation in the middle, we must feel doubly struck by the magnificent pageantry and profusion of detail which characterizes the treatment of the main subject in all these Paradise paintings. In examining these rich and wellnigh overcrowded compositions, we best realize what justified M. Petrucci's observation that 'Tun-huang presents to us Buddhist iconography precisely at the moment when it was most abundant and most sumptuous'.[19] Bewildering as the first impression may be, it soon becomes clear on closer examination that this host of celestial beings and all the accessories of their elaborate staging are arranged on well-defined lines, which with only slight changes govern the composition in all our pictures of Buddhist Heavens, whoever is their presiding Buddha. It needs scarcely to be pointed out that the grouping is strictly symmetrical throughout, and that a scheme so uniformly observed presupposes prolonged evolution before even the oldest of the Sukhāvatī representations of this series was painted.

Triad of Amitābha.

An interesting little drawing which has found its way into our collection, and to the true character of which M. Petrucci has first drawn attention,[20] shows us the simple main outlines of the plan which underlies all these compositions. It marks in the centre the lotus seat of Amitābha, with Avalokiteśvara

[15] The *Amitāyurdhyāna-sūtra*, translated into Chinese in A.D. 424, has been made accessible by Professor Takakusu's English version in *Buddhist Mahāyāna Texts*, II, in *Sacred Books of the East*, xlix (1894).

[16] The number of individual scenes is not everywhere the same, nor their sequence identical. For particularly numerous scenes, see Ch. 0051, 00216 (with inscriptions); v. 001; xxxiii. 003; liii. 003; lvi. 0018. In many cases the episodes represented still await exact identification by an expert, e.g. in Ch. 00216 (*Thousand B.*, Pl. XXX).

[17] See Ch. 00216. *xiv*; 00457. *ii*; v. 001. *ii*; lv. 0047. *ii*; lvi. 0018. *ii*; lvi. 0034. *i*.

[18] See Ch. v. 001. *i*; xxxiii. 003. *ii*; lv. 0033. *i*. For the derivation of the 'Yamagoshi-Amida', traditionally ascribed to a vision of the celebrated priest Eshin of the tenth century, cf. *Kokka*, No. 302, p. 3; also Pl. I–III.

[19] Cf. *Annales du Musée Guimet*, xli. p. 126.

[20] See Ch. 00186 (Pl. CIII); Petrucci, *Annales du Musée Guimet*, xli. pp. 126 sq. As Miss Lorimer justly points out to me, the drawing may well have been intended to serve as a substitute for a proper painting of the Western Paradise on the part of a votary unable to afford the cost.

on his right and Mahāsthāma on his left, the Kwannon and Seichi making up the triad of Amitābha (Amida) in Japanese Sukhāvatīs. Between Amitābha and his two Bodhisattva assistants are placed in it Bhaiṣajyarāja and Bhaiṣajyasamudgata, disciples of Śākyamuni, and this makes it possible to identify the figures of disciples which often appear in our Sukhāvatī paintings on either side of the central Buddha.[21]

Minor groups of Bodhisattvas, etc.

By the sides and in front of the triad, which in pose and dress usually reflects Indian hieratic tradition more closely than the other figures, we see seated or kneeling groups of smaller Bodhisattvas, varying in numbers but always richly onamented. The broad main terrace which is occupied by these chief divinities and their attendants, filling the middle portion of the picture, is shown as rising above the lake of Sukhāvatī. On a smaller terrace, running out in front and on a lower level, we see seated a celestial orchestra composed of musicians who are dressed as Bodhisattvas but sometimes display more realistic masculine features. The various musical instruments played by them are of considerable archaeological interest and will be found discussed in the expert notes of Miss Schlesinger.[22] The dancer, manifestly female, and probably an Apsaras, whose performance the music is meant to accompany, appears always prominently in the forepart of this terrace, engaged in graceful and rapid movement cleverly expressed by the floating garment and the long scarf waving in her hands.

Celestial music and dancing.

Groups below central assemblage.

Two separate terraces rising above the lake in the bottom corners of the picture accommodate each a subsidiary Buddha seated on his altar and attended by two minor Bodhisattvas.[22a] On the stairs leading down from these terraces to the water there usually appear infants representing newly reborn souls in the act of moving upwards to take their place in the divine assembly, whose joyful abode they are to share thereafter.[23] On a raft or low platform over the lake in the centre of the foreground a Garuḍa is ordinarily presented with four sacred birds before him. Elsewhere on the water float lotus flowers in bud or open, sometimes with infant souls rising from them. The upper portion of the painting is always devoted to the representation of the Celestial Mansions showing halls with wide verandahs, double-storied pavilions, open shrines raised on flanking towers, etc., all in pure Chinese style and perspective. Closer study of this architecture would offer archaeological interest, just as, e.g., the representation of the valances depicted in front of the altars furnishes a very welcome explanation of the large patchwork valances which form such interesting items among the textile relics recovered from Wang Tao-shih's hoard.[24] The topmost part of the picture, where preserved,[25] shows the deep blue sky filled with small seated Buddhas floating on clouds; flying streamers and canopies; beribboned musical instruments, etc. In conclusion may be noted the frequent prevalence of green tones, especially in the colouring of the background, which is a striking feature of the Sukhāvatīs and also of other wall-paintings in the Caves of the Thousand Buddhas.

Celestial mansions above.

In the series of paintings just discussed only one, Ch. lv. 0047, retains figures of donors. Poorly preserved as they are, they show distinct resemblance in dress and coiffure to the donors in

[21] The number of these disciples varies in our paintings. In some they are shaven as monks (Ch. iv. 001; lv. 0047), in some their hair is close-cropped (*Ch. 0051, 0068; liii. 003). In Ch. xxxiii. 003; lviii. 0011 they are absent.

It is worth noting that the four Lokapālas whom the plan shows around the triad are not to be found in the Sukhāvatī paintings here discussed, though we have met with them above (p. 884) in the simplified representations Ch. xlvi. 008; lii. 004. They appear also in Maitreya's Heaven, lviii. 001 (see below, p. 890).

[22] Cf. Appendix *H*; see also *Ch. lii. 003 in Descriptive List, and above, p. 851.

[22a] Regarding these subsidiary groups, which M. Petrucci considers always identical with the central Buddha and his attendant Bodhisattvas, cf. Appendix *E*, III. iv.

[23] For inscriptions defining the rank to be occupied by the infant souls in their new life, cf. Ch. xlvii. 001 (*Thousand B.*, Pl. XI) and Ch. 00216.

[24] Cf. for painted altar valances Ch. lviii. 0011; lii. 004 (Pl. LXII). For real ones, see below, pp. 899 sq.

[25] See e.g. Ch. 00216 (*Thousand B.*, Pl. XXX).

the paintings Ch. lv. 0023 and xx. 005, dated A. D. 864 and 891 respectively.[26] Hence the attribution of this painting to the later part of the T'ang period becomes probable.[27] With the Sukhāvatīs of Amitābha must be classed also two large silk paintings, Ch. lvi. 0018, 0034, which show us the Paradise of that Buddha represented as *Amitāyus*, the 'Giver of Longevity'. The scheme of composition in the main part of the picture, as well as in the side-scenes, agrees in all essentials with that in the previous series, except that by the side of the central Buddha we find here Vajrapāṇi on the left and Mañjuśrī on the right, the two chief Bodhisattvas associated with this particular form of Amitābha.[28] The pose and general treatment of their figures are distinguished by a much closer adherence to the hieratic 'Indian' style, and their special attributes help to fix the identification. The same peculiarly 'Indian' type is also noticeable in the figure of Amitāyus.

Paintings of Amitāyus' *Sukhāvatī.*

Paradise of Śākyamuni.

But Amitābha : Amitāyus is not the only Buddha whose Paradise is represented among our paintings. If M. Petrucci's identification is right, we may recognize in two interesting and relatively well-preserved pictures the Heaven presided over by Śākyamuni himself, the historical Buddha whose mystic counterpart Amitābha is supposed to be.[29] The two paintings, Ch. xxxviii. 004; liv. 004, are distinguished from the rest of the Paradise pictures by showing on their side panels scenes drawn from the legend of Kalyānaṃkara and Pāpaṃkara. The lengthy inscriptions accompanying these scenes in Ch. liv. 004 have been recognized by M. Chavannes as partly taken from a Chinese Sūtra text which he had published in 1914, and all were to be treated along with the illustrations in the separate volume which he was preparing.[30] The general scheme in both paintings agrees with that found in Amitābha's Sukhāvatīs, but there are some significant minor differences. Thus in Ch. liv. 004 the places of the subsidiary Buddhas in the corners below are taken by groups of musicians on separate terraces. The central figure of the Buddha is here attended by two chief Bodhisattvas, two disciples with shaven heads appearing on either side of him. Among these disciples, one of whom is represented as old and emaciated, M. Petrucci recognizes Śāriputra and Maudgalyāyana distinctly named by inscribed cartouches at the side of Śākyamuni in Ch. xxxiii. 001.[31]

In Ch. xxxviii. 004, which is somewhat simpler in composition,[32] we find again a peculiarity of arrangement in the foreground. The bottom corners are occupied by two graceful Garuḍa figures, while on a large terrace between them appears a seated Buddha of unusual type, taken by M. Petrucci for Śākyamuni, with representations of the Sun and Moon on his shoulders and of Mount Meru in front. In both pictures the figures of the donors are preserved, and it is of interest to note that their costume agrees with that seen in the dated paintings of A.D. 864 and 891,[33] while differing from that of the tenth-century donors.

[26] See above, pp. 880; 885, note 10.

[27] The same holds good also of Ch. xxxviii. 004, showing the Paradise of Śākyamuni (?); see below.

[28] Cf. Grünwedel, *Mythologie des Buddhismus*, p. 118, Fig. 92.

[29] Cf. *Annales du Musée Guimet*, xli. p. 129; below, Appendix *E*, III. vii.

[30] In a letter dated June 11, 1917, M. Chavannes referred me to his translation from the *Ta fang pien fo pao ngen king* in *T'oung-pao*, 1914, pp. 471 sqq.; also to his *Cinq cents contes et apologues*, i. pp. 81 sq., for some other scenes. [For M. Chavannes' translations of the inscriptions in Ch. liv. 004, see now Appendix *A*, V. A.]

[31] See above, p. 882. On the strength of the inscribed Bodhisattva figure in Ch. xxxiii. 001 M. Petrucci took the Bodhisattva on the right in Ch. liv. 004 for Ākāśagarbha (Viśvapāṇi), the one on the left for Kṣitigarbha; cf. *Annales du Musée Guimet*, xli. p. 129; below, Appendix *E*, III. vii.

[32] See *Thousand B.*, Pl. VII. Here only two disciples are found by the side of the central Buddha, both of childlike appearance. The type of the chief Bodhisattvas resembles that usually found by the side of Amitābha.

[33] See Ch. lv. 0023 (*Thousand B.*, Pl. XVI); xx. 005; cf. also above, pp. 880; 885, note 10. It must be mentioned, however, that in Ch. xxxviii. 004 three of the men wear the peaked and tailed caps usual in the side-scenes, which, as explained above, p. 851, seem to belong to a somewhat earlier period.

Paradise of Bhaiṣajya-guru.

Two fine paintings, both of considerable artistic merit,[34] show us the Paradise of Bhaiṣajyaguru, the Buddha of Medicine. Its representation was to be expected in view of the widespread cult which this form of Buddha has, evidently since an early period, enjoyed in Northern Buddhism from Tibet to Japan.[35] In both paintings the Paradise representation is flanked by a series of marginal scenes illustrating legends connected with Bhaiṣajyaguru. These scenes, all in purely Chinese style and furnished with inscriptions, were to have been fully explained and commented upon by MM. Petrucci and Chavannes.[36] The main lines of composition and arrangement in the Paradise portion agree also here with those observed in the Sukhāvatīs of Amitābha. But there are some points of divergence which, as they are found in both pictures, may be considered as peculiar to the type of this Buddha's Paradise. Among these may be briefly mentioned the appearance of twelve Kings, richly dressed and armoured figures closely recalling the type of the Lokapālas and occupying separate terraces in the foreground; also the introduction of two subsidiary Buddhas and Bodhisattvas with attendants in the bottom portion. Whether the representation of a Thousand-armed Avalokiteśvara in one of the top corners and of Mañjuśrī in the other[37] is peculiar to Bhaiṣajyaguru's Maṇḍala cannot be determined, as the topmost portion of Ch. liii. 002 is lost.

Details of interest in Ch. lii. 003.

Ch. lii. 003 is a particularly spirited and carefully executed painting, and fortunately its fine colouring, as the portions reproduced in *Thousand B.*, Plates I, II, show, has been well preserved. Among its many interesting details only a few can be mentioned here. The two chief Bodhisattvas enthroned at the side of the central Buddha are identified by M. Petrucci as Mañjuśrī and Samantabhadra. The former appears again in the right top corner, carrying the Thousand Alms-bowls, which are nowhere else represented among our paintings. Similarly unique among Paradise pictures is the presence of Lokapāla-like warriors and demons forming the outer ranks of the central triad's *cortège*.[37a] They and some other secondary figures impart an element of animation to the scene. It is in keeping with this that we see the richly dressed dancer, here unmistakable as a girl, engaged in very spirited saltation, and by her side two infants violently dancing in joy. On floating lotuses appear other newly reborn souls in a variety of stages, just springing to life, curled up in happy infant sleep, or sitting as small Bodhisattvas with an air of consciousness not yet fully awakened. For the instruments played by the unusually numerous orchestra, some exactly resembling pieces preserved in the Shōsōin, reference may be made to Appendix *H*. Even to the figures of subsidiary Buddhas, elsewhere seated in statue-like repose within side pavilions, the painter has imparted life by showing them and their attendants advancing from their abandoned lotus seats to the railing before the wings of the main terrace. Even more living are the small Bodhisattvas who are seen sitting at their ease on verandah railings, pulling up blinds, and otherwise enjoying their blissful leisure. Finally attention may be called to the excellence of the drawing, vigorous in all its delicate clearness, and the skilful balancing of the once brilliant colours.

Paradise painting, Ch. liii. 002.

Similar qualities of finished workmanship are displayed in the other picture of Bhaiṣajyaguru's Paradise, Ch. liii. 002 (Plate LVI); but there is not the same wealth of figures and colours, and an air of quiescence pervades the whole scene. Here fine individualized figures of disciples appear between the central Buddha and the two chief Bodhisattvas, who carry lotus buds in their hands,

[34] For *Ch. lii. 003, which in its complete state must have measured over 7 by 6 feet, see Pl. LVII; also Pl. I, II of *Thousand B.*, each reproducing in colour a portion of the painting on the R. and L. of the central Buddha. For Ch. liii. 002, also excellently preserved in colour, see Pl. LVI. For points of iconographic interest, cf. M. Petrucci's notes, Appendix *E*, III. vi.

[35] Cf. Grünwedel, *Mythologie des Buddhismus*, p. 118.

[36] In *Mémoires concernant l'Asie orientale*. For the Sūtra text helping to interpret these scenes, cf. Appendix *E*, III. vi.

[37] See *Ch. lii. 003, Pl. LVII.

[37a] The figure of a demon holding up a child is of special interest, as it has its counterpart in the fine fragment Ch. 00373. a (*Thousand B.*, Pl. XLVI) of a large paper painting, remarkably well executed, which may also have represented a Maṇḍala of the type of *Ch. lii. 003.

but offer no other mark for definite identification. The colour-scheme is unusual and the painting is remarkably fresh.

Paradise of Maitreya, Ch. lviii. 001.

Apart from a fragment, Ch. lv. 002, representing an as yet unidentified Jātaka scene which may have once belonged to the side of a Sukhāvatī, there remain only two pictures of this class to be considered by us. One is the well-preserved silk painting Ch. lviii. 001 (Plate LVIII) which represents the Heaven of Maitreya and, above and below it, scenes taken with their inscriptions from the *Maitreyavyākaraṇa-sūtra*.[38] Not equal in composition and artistic execution to the best of the other Paradise pictures, it yet claims special interest as the only representation of that famous Tuṣita Heaven in which the future Buddha of the world period is supposed to reside. There, according to sacred legends, numerous great Masters of the Law had proceeded to consult Maitreya, and there pious Hsüan-tsang desired to obtain his rebirth.[39] That Maitreya is presented to us in the centre of the painting as a Buddha, though his attainment of the Bodhi still belongs to a future age, is entirely in keeping with the iconographic practice of Northern Buddhism.[40] But our picture does not show him either with the *dharmacakra-mudrā* of the hands, which is his usual characteristic when seated, or with the small flask of ambrosia, already his accepted cognizance in Gandhāra art.[41] Nor can the two large Bodhisattvas seated by his side be identified at present. The two monkish figures which appear between them and Maitreya are explained by M. Petrucci as representing the Genii of Good and of Evil. Two Lokapālas and two Vajrapāṇis, exactly of the banner type, flank the principal triad. The group of dancer and musicians in front of Maitreya's altar, and one subsidiary Buddha with his Bodhisattvas occupying the end of the terrace on either side, complete the simple and yet overcrowded scheme of this Paradise.

Legendary and votive scenes in Ch. lviii. 001.

With regard to the legendary scenes at the top, two observations must suffice here. On the heads of the figures at the right, apparently magistrates, we note the wide-flapped black hats which are almost invariably worn by the donors of our tenth-century paintings. That the setting of these, as of all other legendary scenes, is designed on purely Chinese lines is proved in characteristic fashion by the ranges of pine-clad mountains which serve to divide the top scenes from Maitreya's Heaven. No painter about Tun-huang is ever likely to have seen such mountains around him, still less any of the artists whose work lay in those Turkestān oases at the foot of the most barren of ranges. At the bottom of the painting the central scene showing the construction of a Stūpa is of distinct antiquarian interest. The shape of the Stūpa proper seems to be cylindrical, with a low flat dome and resting on a square base. The objects displayed on long altars by its sides, including bundles of manuscript rolls, may represent votive offerings made at the time of consecration. The scenes in the bottom corners, which show the reception into Buddhist orders of a man and a lady, both marked by their following as personages of rank, also offer points of archaeological interest.

Painting of Paradise unidentified.

Quite apart from the other Paradise pictures stands the large silk painting Ch. 00350.[42] In its upper third it contains the representation of a Buddhist heaven; but the rest is occupied by scenes,

[38] For large-scale reproductions of parts of this painting, see *Thousand B.*, Pl. IX. The explanation of the legendary scenes, first identified by M. Petrucci (*Annales du Musée Guimet*, xli. pp. 127 sq.), and the interpretation of the inscriptions were to have been furnished in MM. Petrucci and Chavannes' separate volume in the *Mémoires concernant l'Asie orientale*. For other details, cf. Appendix *E*, III. v.

[39] Cf. Foucher, *Iconographie bouddhique*, i. p. 113, with note 1; also Julien, *Vie de Hiouen-tsiang*, p. 345.

Why Maitreya should have to rest content with a single representation of his Heaven among our paintings, while other Buddhas' Sukhāvatīs are so numerous, need not concern us here. But it is significant that Japanese archaeologists seem still in doubt whether his 'Maṇḍala' was ever painted; see Petrucci, *Annales du Musée Guimet*, xli. p. 127.

[40] Cf. Grünwedel-Burgess, *Buddhist Art*, pp. 185 sq., 189.

[41] Cf. Grünwedel-Burgess, *loc. cit.*, pp. 186, 191.

[42] I regret that no reproduction of this interesting painting could be provided. It was for exhibition purposes left to the last in the condition of a crumpled-up bundle, just as originally recovered.

some secular, some celestial, which in parts it is difficult to demarcate, and the subject and general connexion of which still remain to be determined. A conspicuous feature of the whole is the absence of a predominant figure and of that rigid symmetry and centralization which characterize the other Sukhāvatī compositions. It is curious to find the Paradise scene placed here behind a high battlemented wall. Other peculiarities will be found fully described in the List.

Section IX.—MISCELLANEOUS PAINTINGS, WOODCUTS, AND DECORATIVE REMAINS

It still remains for me to pass in rapid view those paintings and drawings, almost all on paper, which either on account of their subjects or their form could not conveniently be brought into the classes already described; next, to give a brief account of the woodcuts; and, finally, to refer to a few miscellaneous decorative remains other than textiles, as well as to some wood carvings. In the first place mention may be made of a small group of paper paintings which claim interest both by their subjects, in part non-Buddhistic, and by their artistic merit. Ch. 00380 (*Thousand B.*, Plate XXXIII) presents an aged hermit walking with a tiger by his side, both figures drawn with masterly skill. The identification of the subject is still uncertain; but the appearance of a small Buddha on a cloud above proves that some Buddhist saint is intended. The same subject is shown also by the fragment Ch. 0037, but in rough work. In the case of two paintings, excellently executed by the same hand and reproduced side by side in *Thousand B.*, Plate XXXII, Tibetan inscriptions, deciphered and fully interpreted by Dr. L. D. Barnett, clearly indicate the figures represented.[1] In Ch. 00376 we see Kālika, a disciple of Śākyamuni and well known to Mahāyāna tradition as the fourth of the great Apostles, or Sthaviras. The companion picture, Ch. 00377, represents a Bodhisattva, of 'Indian' type and flanked, like an Avalokiteśvara, by the discs of the Sun and Moon. The paper painting Ch. 00401, probably representing Tārā, belongs to the same series.

Buddhist paper paintings.

Ch. 00150 seems of non-Buddhist character; it shows in spirited drawing a bearded man, in Chinese costume and in the act of writing, facing a dragon with the legs of a horse and with flames rising from head and wings.[2] The suggested identification of the scene with the Chinese legend of the ancient Emperor Fu-hsi receiving the first written characters 'from a supernatural being called the dragon-horse' seems certainly tempting,[3] but it leaves the string of coins lying between the two figures as yet unexplained. The figure of a monk seated in meditation, which appears in the fine drawing Ch. 00145 of pure Chinese style (Plate XCVII; *Thousand B.*, Plate XXVII), also remains to be identified. The vigorously drawn lion, also in Chinese style, of Ch. 00147 (Plate XCVII) deserves mention among smaller pieces.[4]

Pictures of non-Buddhist subjects.

In a second group may be classed illustrations belonging to illuminated Chinese manuscripts, whether in roll, Pōthī, or book form. Thus we have numerous miniatures of small seated Buddhas in the rolls Ch. 00188, 00210; xi. 003. a, b, all containing a treatise on the names of the Thousand Buddhas or portions thereof. Buddhas with varying attendants are shown in the illuminated Pōthī book and leaves, Ch. 00226 (Plate XCIV), 00399; xi. 001–2 (Plate XCII). The Pōthī leaves, Ch. 00217. a–c (Plate XCVI), represent animal-headed female demons whom the Chinese and Brahmī inscriptions

Illuminated Chinese manuscripts.

[1] For Dr. Barnett's notes, see Appendix *K*.

[2] See *Thousand Buddhas*, Pl. XXXIII.

[3] Cf. Mayers, *Chinese Reader's Manual*, p. 48.

[4] Cf. also Ch. 00412. Ch. 00410, 00521 are fragments of silk paintings with subjects such as a group of musicians on a bullock-cart, flowers with a butterfly, etc., the original association of which cannot be determined.

seem to credit with the power of saving children from illness.[5] The text of Ch. 00214 (Plate XCVIII), apparently magical, is interspersed with sketches of monsters, while fine drawings illustrate the calendrical manuscript fragment Ch. 00164 (Plate C). A third small group is of distinct iconographic interest. It comprises drawings, mostly in the form of paper scrolls, illustrating mystic poses of hands, attitudes of arms, emblems, etc., which have their significance in Buddhist symbolism, as seen in Ch. 00143 (Plate XCVIII), 00146 (Plate XCVII), 00424. In Ch. 00209 (Plate XCVI) Chinese inscriptions explain the points of beauty as shown in the human face and body and their symbolic meaning; the same is done in Ch. 00153 (Plate XCIX) for the different fingers of either hand.

Drawings of mystic poses, etc.

Magic diagrams or *Maṇḍalas.*

A relatively large group is represented by the drawings in which we find Buddhist magic diagrams of the kind properly designated by the term *maṇḍala.*[6] The divinities and emblems intended are sometimes indicated merely by written names, not figures, while in others explanatory inscriptions are added to the latter. The drawings thus interpreted may prove useful hereafter to the student of a branch of Buddhist lore which, however abstruse, may yet claim a certain importance from the point of view of religious symbolism and cosmology.

Sketches for large compositions.

Far more interesting for the archaeologist are some paper scrolls covered with rapid sketches which are obviously designs intended for larger compositions. They allow us to catch a glimpse as it were of the manner in which those old Tun-huang masters of the brush planned out the general ordinance and rough details for their big paintings or frescoes. The sketches of the long scroll Ch. 00144 (Plate XCV, XCVII) are particularly curious because it is possible to trace a connexion between some of them and certain scenes represented either in our Ch'ien-fo-tung paintings or in frescoes still extant in the shrines.[7] The sketch of a horse and a camel with empty saddles, led by attendants, in Ch. 00207 (Plate XCVI) is of little artistic value.[8] But the lines of Chinese writing over which it has been drawn upside down invest it with distinct historical interest; for, as M. Chavannes has shown in the very last contribution which reached me from his indefatigable hand,[9] they give the name and full titles of the King of Tun-huang and his queen, whose respective mounts the horse and camel were probably intended to represent as part of a larger composition. M. Chavannes' learned notes demonstrate that the facts recorded, including the date, A.D. 966, are in perfect agreement with the information regarding this chief of the Tun-huang region furnished by the Sung Annals.

Sketch with historical record.

Pounces and stencils.

That a large number of the paintings and frescoes found at the Thousand Buddhas were produced with the help of pounces or stencils could be safely concluded from a variety of indications. Nevertheless it is gratifying to note that these simple aids to artistic reproduction, intended to meet devout needs *en masse*, are actually represented among our relics. Ch. 00159 (Plate XCIV) is a completely preserved pounce of strong buff paper, showing a well-designed group of Amitābha seated between Mahāsthāma and Avalokiteśvara and two haloed disciples. The way in which only one half of this modest 'Maṇḍala' is drawn in outlines, while the other half is pricked only, illustrates the convenient method by which the perfectly symmetrical arrangement characteristic of these compositions was produced. In Ch. xli. 001–004 we have four paper pounces of the same sort, each showing a seated Buddha, but with the hands in different poses. Ch. 00425 is a paper

[5] For other frs. of illustrated Chinese manuscripts, see Ch. 00212–213, 00218.

[6] See Ch. 00186 (Pl. CIII), which shows one of the simplest forms; 00187, 00189, *00190, 00219, 00379, 00398, 00428; xxii. 0015; lvi. 0033. With these 'Maṇḍalas' may be noted also the astrological (?) chart, Ch. 00206.

[7] In Ch. 00208. a, b we have fragments of a scroll with similar sketches.

[8] For another rough paper painting with camels and horses, which may possibly represent a continuation of this sketch, see Ch. 00388.

[9] Cf. Appendix *A*, V. C.

stencil for a Bodhisattva figure, while the fragment of a Lokapāla drawing, Ch. 00426, on paper made transparent shows how tracing was practised.

Collection of woodcuts.

The woodcuts form a small but interesting collection by themselves. They illustrate at the same time the high stage of technique which the art of printing from wooden blocks had attained comparatively soon after its first invention in the T'ang period,[10] and also the earliest use to which it is likely to have been put. Among our woodcuts there are four for which exact dates corresponding to A.D. 868, 947, and 980 are recorded in the accompanying block-printed Chinese texts, and the earliest of these shows the xylographer's craft already fully developed as regards the reproduction both of designs and of written characters.

Chinese printed roll, with frontispiece, dated A.D. 868.

The printed roll, Ch. ciii. 0014, dated A.D. 868 and containing in its 16 feet of length the complete text of a Chinese version of the *Vajracchedikā*, is the oldest specimen of printing at present known to exist, and its fine frontispiece, reproduced in Plate C, is the earliest datable woodcut. It shows Śākyamuni seated on a lotus throne, attended by a host of divine beings and monks and discoursing with his aged disciple Subhūti. Design and execution are of thoroughly Chinese style and, considering the great popularity of the text and the cost involved in engraving, it is reasonable to suppose that it was produced in China proper.

Local origin on the other hand is very probable in the case of the printed prayer-sheets, Ch. 00185. a–f (Plate CIII), 00158, etc. (Plate C), dated A.D. 947 and showing figures of Avalokiteśvara and Vaiśravaṇa respectively; for on woodcuts of the same date, evidently belonging to an identical series which M. Pelliot recovered from the hoard, Ts'ao Yüan-chung, known from historical records as chief of Tun-huang about the middle of the tenth century, is mentioned as having ordered the engraving.[11] The year corresponding to A.D. 980 is named in the block-printed copy of a Buddhist charm, with Chinese and corrupt Brāhmī text, Ch. xliii. 004 (Plate CII). But here the place of production is uncertain.

Block-printed figures and prayer-sheets.

There can be no doubt that, just as in the West, the cutting of wooden blocks was first used by the Chinese for the reproduction of designs, presumably of divine figures, sacred diagrams, and the like, and only in the sequel applied also to the printing of texts. The Buddhist fondness for the multiplication of identical sacred images as a convenient means to accumulate religious merit must have made use of the new invention quite as eagerly as it did of plaster moulds for the rapid reproduction of miniature Stūpas and relievo images in clay. We see this aspect of wood-engraving illustrated in a very characteristic fashion, not only by the numerous copies found in the collection from identical blocks of sacred designs and prayer-sheets,[12] but also by the number of rolls and big sheets of paper bearing impressions *ad infinitum* from the same woodcuts.[13] In a few copies from larger woodcuts, colours have been applied by hand.[14]

Buddhist subjects of woodcuts.

Within the limitations imposed by the smaller number and size of the woodcuts we find among them most of the subjects represented with which we have met in the paintings. That of the frontispiece Ch. ciii. 0014 (Plate C) may be taken as corresponding in character to the scenes from Gautama Buddha's Life, and scarcely suffers by comparison. Figures of Buddhas are found frequently, and in different attitudes.[15] Among Bodhisattvas, Avalokiteśvara, shown always in 'Indian' style, is

[10] Cf. Pelliot, *B.É.F.E.O.*, viii. p. 526, where the interest of the woodcuts from Ch'ien-fo-tung is fully discussed. The specimens recovered there by M. Pelliot belong to the tenth century.

[11] Cf. Pelliot, *B.É.F.E.O.*, viii. p. 526; for Ts'ao Yüan-chung, cf. also above, p. 838, note 11, and M. Chavannes' notes, Appendix *A*, V. c.

[12] See Ch. 0020, 00150. a–d, 00151. a–s, 00158, 00203. a–e; lvi. 0026, etc.

[13] See Ch. 00414–19, 00421–22.

[14] Cf. Ch. 00150. a, 00421.

[15] See Ch. 00154, 00414, 00415, 00417, 00419, 00421; the third shows two attendant Bodhisattvas. Ch. 00152 (Pl. XCIX) shows Amitābha Buddha seated within the Sanskrit text of a charm; cf. also Ch. 00203. a–e; xliii. 003.

predominant as usual.[16] Besides him we find Mañjuśrī and Samantabhadra, as well as other Bodhisattvas who are depicted in various attitudes but not defined by attributes or names.[17] Vaiśravaṇa is represented by an iconographically interesting woodcut of A.D. 947,[18] and a Vajrapāṇi, too, appears in a roughly cut design.[19] Finally, there remain to be mentioned two large charms: Ch. xliii. 004 (Plate CII) shows a Bodhisattva within concentric rings of an undecipherable text, evidently meant for liturgical Sanskrit, and an elaborate border with sacred emblems, etc.; Ch. 00420 is of simpler design, with Chinese and Tibetan text.

Miscellaneous pictorial remains.

Among the few miscellaneous pictorial remains which still have to be mentioned there are two poorly preserved fragments of painted wooden panels;[20] two paper pictures of shrines cut out in open-work and resembling silhouettes in effect;[21] some miniature painted canopies in linen;[22] and a number of artificial flowers of wood or paper.[23]

Here I may briefly refer also to the few pieces of painted wood-carving which came to light during my search of the deposit in the hidden chapel. That its contents had originally comprised other sculptural remains in a better state of preservation was suggested by local information at Tun-huang about small statues in metal that had been removed and used for presents on the first opening of the chapel.[24] Among wooden statuettes recovered, all shown in Plate XLVII, the carefully finished small figure of a Buddha seated in meditation, Ch. lvi. 0011, and the very gracefully modelled relief of a flying Gandharvī, Ch. 007, deserve special notice.[25] Lastly, mention must be made here of the small but finely executed terra-cotta relief plaque, Ch. lvi. 0012 (Plate CXXXIX); it shows a Buddha of pure Gandhāra style, seated in European fashion, and was evidently cast from a mould of early workmanship.

[16] See Ch. 00150. a–d (Pl. CI), 00151. t (Pl. XCIX), 00185. a–f (Pl. CIII, also in lvi. 0026); liv. 0010 (Pl. C).

[17] See Ch. 00151. a–s, 00204 for Mañjuśrī; Ch. 00205 for Samantabhadra; Ch. 00416. a–b, 00418, 00422 for uncertain Bodhisattvas.

[18] See Ch. 00158 (Pl. C); also xxx. 002; xxxvi. 002.

[19] Cf. Ch. 0020.

[20] Ch. xxii. 001. a shows a seated Buddha; xxvi. a. 0011 small scenes that recall those of adoration of sacred objects found down the sides of certain Buddhist Paradise paintings.

[21] Ch. 00148 (Pl. XCVII), 00423.

[22] Ch. 00138; lvi. 0020, 0025; for their decoration, see Ch. 00381 in List. For plain silk or linen specimens, see Ch. 00442.

[23] Ch. 0077, 00149. a–f.

[24] Cf. Pelliot, *B.E.F.E.O.*, viii. p. 528.

[25] Ch. 005–6, 008 are fragmentary and of inferior workmanship. Ch. 0021. a is a fragment of a painted wooden vesica and halo, evidently from some relief image.

CHAPTER XXIV

TEXTILE REMAINS AND MANUSCRIPTS FROM CH'IEN-FO-TUNG

Section I.—DECORATED TEXTILE RELICS: THEIR MATERIAL, USE, AND TECHNIQUE

Number and interest of decorated textiles.

Among the art remains recovered from the walled-up chapel of the Thousand Buddhas by far the most important, both in number and interest, after paintings, drawings, and prints, are the decorated textiles. Almost all in silk, they offer a wealth of novel materials for the study of the history of ornament and technique as developed in Chinese textile art. Their interest is greatly increased by the fact that they also throw light on its relations with the textile products of Central Asia and the Near East. In view of the importance they may claim it seems desirable to supplement the detailed accounts of individual objects, which Mr. Andrews and Miss Lorimer have furnished in the Descriptive List, by a brief general synopsis of these fabrics with regard to their material, their original use, and the methods and styles of their decoration. It is a task which can be undertaken here only with obvious limitations as regards knowledge, scope, and space, and I should hesitate to attempt it were it not for the hope that, cursory as my review must be, it may help to draw the attention of competent experts to the varied materials contained in this portion of the collection and to facilitate their use for future researches.

Embroidery picture of Śākyamuni on Gṛdhrakūṭa.

But before proceeding to this review it will be convenient to single out for separate notice two relics, which, if their technique classes them as textiles, yet in artistic character attach themselves most closely to the paintings discussed in the preceding chapter. I mean, in the first place, the large hanging in silk embroidery, Ch. 00260 (Plate CIV), showing Śākyamuni on the Vulture Peak, to which on account of its subject reference has been made above.[1] Both by its size—the perfectly preserved central figure is practically life-size—and by the remarkably careful execution, it is one of the most impressive of the pictorial remains recovered. We have had occasion to prove that the fine, if hieratically stiff, figure of the Buddha in every detail of its pose and dress reproduces a specific type, fixed originally by some Indian sculptural representation of Śākyamuni on Gṛdhrakūṭa, and preserved with equal fidelity also in the statues which the paintings Ch. xxii. 0023 and Ch. 0059 are intended to show us.[2] To the evidence for this interesting iconographic fact it is unnecessary to recur here in detail. The only difference is that in our embroidery picture we see the Buddha standing between a pair of richly-dressed Bodhisattvas and two monkish disciples. While the former are almost completely preserved, the figures of the latter, having fallen along the line of folding while the hanging was stored away and crushed for long centuries, are perished except for remains of the finely drawn heads. The aged appearance of the shaven disciple on the right points to Kāśyapa being intended.

Though the features of the Bodhisattvas' heads betoken the influence of Chinese style, a certain simplicity and stiffness in the design of these attendant figures clearly point to their being still

[1] See above, pp. 851, 878.

[2] See Pl. LXX and *Thousand B.*, Pl. XIII, respectively. Cf. above, pp. 878 sq.

in close touch with Indian models communicated through Central Asia. This, combined with the unmistakably preserved Indian character of the Buddha's type, is apt to create a presumption in favour of a relatively early date of this embroidery picture. But it is only on turning to the figures of the donors below, and noting certain peculiarities of style in accessory features above, that definite support for this belief is forthcoming. A look at the donors, four men kneeling on the right and four ladies on the left, both with an attendant standing behind,[3] is enough to prove that the dress in each case—leaving apart the monk's figure in the men's group—is in closest agreement with that worn by the donors in the two paintings of Amitābha's Paradise, Ch. xlvii. 001, liii. 001. For these a series of closely concordant indications have led us above to postulate a date that cannot be later than the eighth century, but may possibly be even somewhat earlier.[4] Here we find again the same small peaked and tailed caps and long belted coats of the men and, in the costume and coiffure of the ladies, the same characteristic bodices with close-fitting sleeves and the plain small top-knots of the hair. Considering the larger number of donors here represented and the uniformity of these significant features in their appearance, all the evidence must in the case of the embroidery appear even more convincing.

Donors' costume indicates early date.

Affinity to paintings in accessory details.

In accessory details, too, there is a close contact between the embroiderer's work and the above-mentioned two paintings, Ch. xlvii. 001 ; liii. 001, proving that they must belong to the same period and were probably produced under the influence of the same pictorial school. On the sides of the canopy in all three we see the identical pair of graceful Apsaras figures floating downwards, borne by cloud scrolls and their billowing stoles, in an attitude not found elsewhere among our paintings. In the dress of the Bodhisattvas we may note as a common peculiarity the same brocade-like decoration of the edges of the lower robes. Peculiar, too, to the three pictures are the plain sage-green lotus seed-beds on which the divine figures stand or sit. There is little doubt that closer examination of the originals would reveal other common characteristics of the school.[5] Whatever the exact date of production may be, there seems to be no reason to doubt that this embroidery picture must rank with the oldest of our Ch'ien-fo-tung paintings. The needlework in satin stitch is of the finest, showing exceptional care, and to this the picture owes the remarkable freshness of its colour effects and the excellent preservation of all parts that remain.

Other hanging in silk embroidery.

For the second silk embroidered hanging, Ch. 00100,[5a] which calls for notice here, a relatively early date seems also indicated by the internal evidence of its present condition. The extant hanging is clearly a patchwork made up of pieces which must have once belonged to a larger composition, and which had suffered considerable damage, evidently through age, before they were joined up in the very irregular and mechanical fashion which Plate CV illustrates. In the centre we have four narrow strips, worked in close chain-stitch, each showing vertical rows of two small seated Buddhas and intended to make up a diaper such as we find plentifully in the painted wall-decoration of Buddhist shrines from Khotan to Tun-huang, and also in the relievo decoration of the caves of Yün-kang and Lung-mên. In each strip we find pieces sewn together which originally must have occupied a different position but belonged to the same decorative hanging. That undoubtedly was the case also with the fragmentary side-scenes found in the outer strip sewn on to the right. Here the groups, each consisting of a larger figure followed by two or three attendants

[3] See, for the latter figures, also the larger reproduction from Ch. 00260 in *Thousand B.*, Pl. XXXV.

[4] See above, p. 885.

[5] Thus, e.g., my attention is called by Mr. Andrews to the use made both in Ch. 00260 and Ch. liii. 001 of small conventional cinque-foiled rosettes for filling empty spaces and marking in the latter the centres of lotus leaves. It must be left for others to ascertain what chronological indication, if any, can be derived from the figures of the two lions shown seated at the Buddha's feet. The attitude of the left one curiously recalls that of the T'ang sculpture at Lung-mên (seventh–eighth century), seen in Chavannes, *Mission archéologique*, Planches I, No. 306.

[5a] See Pl. CV.

and advancing under an umbrella, are treated in a purely Chinese style. The preservation of these side-scenes is too imperfect to permit of a determination of their subject. But it may be noted that the style of dress is different from, and looks older than, that seen either in the donor figures or in the side-scenes of any of our paintings. The peculiar caps represented in these groups recall the head-dress seen on the donors in the relievos of Kung-hsien which seem to be of early T'ang times, if not older, and may be compared also with that shown by a relievo of A.D. 525 in M. Chavannes' great publication.[6]

Predominance of silk material.

Turning now to the textile remains, which form the proper subject of our review here, we may note in the first place that their material is almost exclusively silk. Among the very few linen pieces only the painted canopy Ch. 00381 deserves, perhaps, passing mention. The absolute predominance of silk among these textile relics, otherwise so varied, is certainly significant. It clearly proves an abundant supply of this material in the Tun-huang region during the centuries preceding the walling-up of the cave. Considering that silk is not an indigenous product of Tun-huang nor to any appreciable extent manufactured in the wide regions of Kan-su, it seems reasonable to connect this abundance of silk remains with the fact that Tun-huang lay on the main, if not sole, route by which trade from the silk-growing provinces of China has passed at all times into Central Asia and to the West.

Technique of undecorated silks.

Leaving the different methods of ornamenting these silk materials for comment further on, I may point out here that among the textile remains of the cave there are also many specimens of undecorated silks. They had been put to use mainly in making up banners and their varied accessories, and are plentiful also among the small votive offerings to be mentioned presently.[7] Regarding the technique of weave shown by the Ch'ien-fo-tung fabrics Mr. Andrews has furnished the following illuminating notes:

NOTES ON THE TECHNIQUE OF TEXTILE FABRICS FROM CH'IEN-FO-TUNG BY F. H. ANDREWS

The textile remains from Ch'ien-fo-tung include examples of the usual hand-loom fabrics corresponding with those made at the present time, and may be classified as plain cloths, cords, ribs or repps, twills, sateens, gauzes and tapestries, with a wealth of figured or decorated materials described under the general designations of damasks, polychrome figured fabrics, and brocades. The technicalities of weaving are extremely complicated. But in the following notes descriptions have been limited to essential features and the multiplicity of names given by weavers, etc., to fancy fabrics has been avoided.

'Plain cloths.'

The simplest form of weaving, technically known as 'plain cloth', consists of two sets of threads at right angles to each other, interweaving alternately, one set of vertical threads, the 'warp', being stretched on the loom, while the other of horizontal threads, the 'weft', is carried by a shuttle forwards and backwards across the warp, interweaving as it goes. A large number of our specimens are of this structure, in some instances producing an amazingly fine fabric in which the silk threads employed are so thin and the weaving so close that the surface texture is almost invisible.

'Cords' and 'Repps.'

When the warp threads are thick and the weft thin, the latter bend round the former and produce a ribbed surface running lengthwise in the fabric, which is then called a 'cord', exemplified in Ch. 00118, Pl. CXI, and excellently illustrated by the grass mat, Ch. 00311, Pl. XLIX. The rich quality given to a finely woven plain silk fabric of this kind is seen in the top vandyke of each of the pendent streamers of the valance on Pl. CIX. When the cord is formed across the fabric by the weft being thicker than the warp, it is called a 'rib' or 'repp'.

'Twill' weave.

The most valuable of all weaves from the designer's point of view is the 'twill', which enables the weaver to produce an unbroken surface of colour while retaining sufficient strength in the structure, and by the use of coloured wefts or warp to produce the most elaborate designs in polychrome. The principle of the 'twill' weave is that, instead of alternate threads of warp and

[6] See Chavannes, *Mission archéologique*, Planches, I, Nos. 407, 408, 414, for the relievos of the Kung-hsien cave-shrines; and *ibid.* No. 433 for the stēlē of A.D. 525.

It is probably a result of the great age of this hanging that the haloed heads of some of the small seated Buddhas have become detached after the extant patchwork was pieced up; for one of these heads now missing in Ch. 00100, see Ch. 00450. c.

It is possible that the small but exquisitely worked embroidery in chain-stitch, Ch. iv. 002, representing a standing Buddha figure (see Pl. CVI), is but a remnant of this sort from some hanging of a similar character.

[7] Cf. for specimens, e.g., Ch. 00237, 00253–8, 00314–15, 0320–6, 00433–6, etc.

weft interweaving as in plain cloth, the interval is increased. For example, the weft may pass over three or more 'ends' (warp threads), then under one, again over three and so on. This long stitch is called a 'float'. As a general rule successive floats should not pass over the same group of 'ends', but each must advance one 'end' before coming to the surface, the result being a more or less pronounced diagonal grain in the fabric, sufficiently well seen in Ch. 00228, Pl. CVI, and Ch. 00232, Pl. CXII. Twill weaving permits of a much closer fabric than does the plain cloth weave, and, by the natural spreading of the relatively long floats on the face of the material, the warp is usually completely hidden and a practically unbroken surface of weft is presented.

'Sateen' weave.

'Sateen' is produced by a slight variation of the twill system, the lustrous surface being due to the length of 'floats' and the covering of the warp. When the weft is of 'tram', that is slightly twisted silk yarn, the sheen is brighter, and most of the polychrome figured silks in the collection have the weft of this kind. In some examples, the width of the weft thread is very noticeable and results in the so-called 'stepped' effect. It is quite obvious that, if a flat band of 'tram' silk passes round a taut warp thread, the line formed by its edge will practically coincide with that of the thread supporting it, that is, it will be straight. The greater the number of such tram threads laid side by side and passing round the same taut thread, the longer the line formed by their combined edges will be. The taut threads being the warp and the 'tram' being the weft, we necessarily have a system of right angles forming the edge of every mass of the figuring silk, and it follows that all curved lines in a design woven in such fabrics must be formed by a succession of advancing or retiring square angles or steps, of which the size will be controlled by the spacing of the warp and the breadth of the weft threads.

'Stepped' effect.

Angularized designs.

To simplify his work the weaver often eliminates curves as much as possible. If this practice be carried too far, the design becomes obscure and, by development through generations on these lines of modification, eventually meaningless, as in the case of many degenerate Asiatic carpet designs. On the other hand, the angularizing of a design often produces an effect of vigorous drawing. An extreme example of 'stepping' tending towards obscurity is Ch. 00230, Pl. CXII. Less destructive is the tendency displayed in other examples, such as the galloping lions in M. I. xxvi. 001, Pl. XLIX, the tapestry fragments Ch. 00166; xlviii. 001; lv. 0034, Pl. CVI, and some of the 'Sassanian' figured silks.

Distortion of design.

Distortion in a design often occurs with the hand-loom as the result of imperfect balance between the width of the warp and the bulk of the weft. This may be due to miscalculation of the number of picks required or to too vigorous or too slack a blow of the reed, or comb, used to compact the weft while weaving, the effect on the design being to elongate or compress it in a vertical direction. This defect is clearly present in the confronting lion design Ch. xlviii. 001, Pl. CXVI, where the bodies are too short for the height of the animals and the rayed border is similarly distorted; and again in the confronting deer, Ch. 009, Pl. CXV, wherein the pearls of the border show the same fault, and in both cases the original circular form of the whole cartouche has become elliptical.

Variations of pattern in twills.

It will be clear from the above description of twill weaving that an infinite variety of pattern based upon the alteration of the twill can be obtained, ranging from the simple diagonal stripe to the most elaborate pattern worked either as a damask or in colourings of most complex kind. The development of the lozenge is merely the diagonal stripe in two opposite directions and is an obvious weaver's design. The concentric lozenge and the thickening of the crossing of the diagonal stripes, whereby a hexagon is formed, are simple variations. In fact all straight-lined geometrical patterns in twill weaving are naturally born of the inevitable crossing of lines necessitated in the production of the fabric. These lines are the vertical warp, the horizontal weft, and the angular track of the twill floats in opposite directions, so that squares and polygons are there in the loom.

Damasks.

Damasks are woven in variations of the twill structure. The ground is usually in warp sateen twill and the pattern in weft sateen twill. That is to say, the ground is formed by the long floats of the warp and the pattern by those of the weft; the two lying at right angles to each other reflect the light at different angles and so cause the pattern to detach itself from the ground. Examples of these, with the complete patterns reconstructed from the fragments available, are shown on Plates CXII (Ch. 00232), CXVII, CXVIII (Ch. 00293. a), CXXI, and others.

Polychrome figured silks.

Several of the polychrome figured fabrics are stout, firmly woven silk cloths, sometimes double, with colours of weft on a warp of thin silk, which appears to have been generally used either in the natural 'gum' state, merely spun, or treated with a stiffening solution. It is in consequence very brittle, in some cases having almost disappeared, leaving the weft of tram with its kink remaining but no warp to keep it together. The weft is beautifully laid, notably in the 'Sassanian' specimens, and the colours are in bands shot across the whole width of the fabric, as may be clearly seen in the reconstructions in Pls. CXV, CXVI, and CXVIII.

Use of 'swivel'.

But in the case of Ch. 00228, 00229, Pl. CVI, and Ch. 0065, 00170, Pl. LV, the use of the 'swivel' is indicated. The swivel in modern weaving is an arrangement attached to the loom by means of which an extra colour required at relatively wide intervals can be applied locally and properly incorporated into the fabric without the necessity of carrying such colours uselessly right across the material. Such spot patterns as those quoted form typical opportunities for this device, which in fact has been employed. In some examples the objectionable practice of carrying long floats on the back and face of the fabric occurs; but they generally show evidence of having been protected at the back by a silk lining. The majority of figured fabrics are well constructed and leave nothing in this respect to be desired.

Gauzes.

In gauzes a different arrangement of threads is observed, having for its chief object the production of an open fabric of more or less transparent texture. Instead of the warp threads lying parallel as in ordinary cloth, in plain gauze they are laid in pairs

which cross each other at every interval between picks, and while one of the pair is always behind the weft, the other is always on the face. The result is a strong fabric in which warp and weft threads are held apart by the crossing, and by varying the crossing and grouping the threads the effect of pattern is obtained. By closing a number of threads together and at intervals opening them out further patterns can be formed, and again, by allowing warp and weft to interweave at regular intervals as in plain cloth, figuring such as that of Ch. 00346, Pl. CXX, may be made.

Silk fabrics from banners and their accessories.

There is considerable variety as regards the uses to which all the fabrics to be discussed here had originally been put and which account for their presence in the chapel deposit. A rich source of supply of silk specimens of all sorts is furnished by the temple banners, distinct from those bearing paintings, and their usual accessories in the way of triangular head-pieces, streamers, etc. The banners, whether made up of pieces of plain silk, damask, or printed silk,[8] conform closely in shape and arrangement to the model of the painted ones described above.[9] Most frequent among portions of banners which had become detached, probably long before the deposit received them, are triangular head-pieces, and as for them rich fabrics appear to have been particularly in favour, these head-pieces and their accessories, such as borders and suspension loops, have proved a specially wealthy mine for finds of interesting decorated silk fabrics.[10]

Textile fragments as votive offerings.

Equally numerous and important are the materials furnished by the miscellaneous small pieces of fabrics which have found their way into the deposit of the walled-up chapel, undoubtedly owing to their character as votive offerings, whatever their use may have been originally in garments, etc. The custom of offering as ex-votos textile fragments, often mere shreds torn from the clothing of devout visitors, at shrines or other sacred places is too well known and too widely spread both in the East and in the West to require special explanation or evidence. Ever since my first explorations in the Tārīm Basin I have repeatedly had occasion to refer to the archaeological value and interest possessed by such deposits of 'votive rags', whether found at ancient or modern sites of pious pilgrimage.[11] Wherever their preservation is assured by the dryness of climate or any other cause, they are likely to provide small textile exhibitions, as it were, for the benefit of the future antiquarian explorer. In the deposit of the Thousand Buddhas we find them not merely represented by a mass of strips and cuttings from decorated and plain silk fabrics of all sorts,[12] but also by various composite pieces made up from such fragments in ancient times. As these may safely be assumed to contain mainly textiles of presumably contemporary origin and use, they obviously are capable of providing chronological indications which may yet prove of value hereafter.

Valances made of textile ex-votos.

These gatherings of textile ex-votos just referred to consist chiefly of two large silk valances, Ch. 00278, 00279 (Plates CIX, CX), and a number of smaller pieces which undoubtedly once formed part of such.[13] That these valances were intended for use as curtains to drape the lower parts of

[8] For specimens of banners proper in plain silk, complete, or of streamers, etc., cf., e.g., Ch. i. 0011, 0020; 00318, 00319, 00321, etc.; for the same in damasks, see, e.g., Ch. 00339–41, 00454, etc.; in printed silks, Ch. 00358, 00372, 00455, etc.

[9] Cf. above, pp. 843 sq.

[10] For more or less complete head-pieces in polychrome figured silks, see, e.g., Ch. 009, 0076, 00118, 00165. a, b, etc., with specimens illustrated in Pl. CXI, CXII; in damask, 0086, 00294; in printed silks, 00292, 00304. a, b, 00371; in embroidery, xxvi. 002 (Pl. CXI).

For suspension loops in figured silks, see, e. g., Ch. 00170, 00182, 00296, 00297, etc.; in embroidered gauze, 00259; in tapestry, 00300. For detached borders of banner head-pieces, see, e.g., Ch. 0058 in tapestry; 00432 in figured silk. In Ch. xxvi. 002 the old suspension loop in figured silk, worn to threads by prolonged use and replaced by another one, furnishes interesting proof of the antiquity of the banner top.

[11] Cf., e.g., *Ancient Khotan*, i. p. 413, regarding the great and varied collection of textile ex-votos hung upon trees at the modern pilgrimage site of Imām Ja'far Sādiq, south of the Niya Site; *ibid.* pp. 429 sq., 441 sq. for the many interesting votive offerings of this kind excavated at the shrine of the ancient fort of Endere, etc.; see also above, pp. 167, 687.

[12] See for such miscellaneous textile pieces, e. g., Ch. 00231–58, 00314, 00320–6, etc., in damasks, gauzes, plain silks; 00228–30 (Pl. CVI), 00362, 00367–9 in polychrome figured silks.

[13] See Ch. 00280 (portion of a large altar valance); 00181, 00227, 00437, 00447 (tabs from valances); xxiv. 009 (Pl. CXIII; streamers from do.).

altars or image bases is made perfectly clear by certain of the Paradise and other large paintings which show draperies made up exactly after this fashion round the altars in front of the presiding divinities.[14] Our extant valances, of which Ch. 00278 measures not less than 26 feet in length and Ch. 00279 over 9 feet, consist principally of a long band of silk fabric to the lower edge of which are attached, first a series of triangular tabs, and next at intervals a row of streamers hung against a short plain silk curtain as a background. The tabs and streamers are made of small pieces cut from ornamented silk fabrics, such as embroideries, figured silks, damasks, gauzes, or prints, used in great variety and without any scheme of arrangement. The streamers, as Plates CIX, CX show, are themselves often composite, and both they and the tabs are frequently finished off with knots or with little tassels and bag-like scraps of other figured silks which may be intended to mark their original use as ex-votos.[15] Different in shape but similar in make-up, as far as the origin of the different materials used is concerned, is the large votive patchwork, Ch. lv. 0028 (Plates CVII, CVIII), composed of rectangular pieces of embroideries, figured silks, damasks, and printed silks, and made striking by the richness of their colours and variety of their ornamental designs. A votive character may safely be assumed also for such minor textile relics as miniature canopies in silk or linen, Ch. 00442, and flowers made of silk gauze, like Ch. 00438.

Silk fabrics in manuscript-roll covers.

Quite distinct in character but, having regard to the limited number of specimens, relatively just as rich a source of fine textile remains are the manuscript-roll covers worked in silk fabrics. The complete specimen Ch. xlviii. 001 (Plate CVI, CXI) is remarkable both for the figured silk of striking 'Sassanian' design used for the borders and bands and for the extremely fine strips of silk tapestry applied for decorative purposes. In shape and construction this manuscript cover and the remains of others less completely preserved[16] show the closest agreement with a specimen of early T'ang origin preserved in the Shōsōin collection of Japan. The same holds good also of the manuscript-roll cover, Ch. xx. 006 (Plate CVI), made of bamboo slips and decorated with delicately woven bands of silk.[17] As a particularly interesting textile object, but one of uncertain use, may be finally mentioned the beautifully embroidered cover, Ch. xxii. 0019 (Plate CVI), which shows floral decoration of most graceful design enriched with silver and gold.

Methods of decoration in textiles.

As might be expected of these varied products of a textile industry which in China, as plentiful records prove, had already attained full development in very early times, we find represented among them almost all essential methods of decoration, as known at the present day in Far-Eastern silk manufacture, the specimens showing a high degree of technical perfection. With the styles displayed in the designs of this decoration and the questions of artistic and archaeological interest raised by them we shall concern ourselves in the next section. Here brief statements as to the several techniques employed, together with references to the principal specimens, will suffice. It is scarcely necessary to add that, though many of these specimens are likely to date from T'ang times and some possibly even earlier, they cannot be expected to throw much new light on the technical development of an industry which on Chinese ground reaches back so much further into past ages.

Patterned silk damasks and gauzes.

The simplest methods of decoration applied to the texture of the fabrics themselves are illustrated by the very numerous silk damasks and gauzes which show patterns executed in monochrome, but with great wealth of varying design.[18] No safe conclusion can be drawn from the

[14] See particularly Ch. lviii. 0011 (*Thousand B.*, Pl. VIII), Ch. 00167 (Pl. LXI).

[15] This intention explains best the tiny human figures represented by some of these knotted ends in Ch. 00279 (q.v.), obviously ex-votos offered in the hope of securing children.

[16] See Ch. 00382 ; liv. 005 (Pl. CVI) ; also 00173 (border), and 00298-99, 00443. b (ties for covers).

[17] That decorated silk fabrics were occasionally used also for 'binding' after the fashion common in the case of Western manuscripts and books is shown by the strip of figured silk found as backing on the Chinese devotional handbook Ch. 0026, printed A. D. 949.

[18] For silk damasks see, e. g., Ch. 0086, 00232-6, 00238-52, 00293-4, 00338, 00482-6, 00488-508, 00513,

fact that these specimens of patterned damasks and gauzes are quite as numerous in our collection as those of the more effective polychrome figured silks. But it is certainly noteworthy that among them we meet far less frequently with designs showing the influence of Western-Asiatic, i.e. Persian, textile art than among the specimens of the latter class. It is this contact with fabrics of the type usually designated as 'Sassanian' which gives, as we shall see, special antiquarian value and interest to many of these figured silks. But, even apart from this, they are bound to attract attention by their brilliant and yet harmonious colouring and the exquisite art of their execution in general. We probably owe the preservation of a relatively large number of specimens to the fact that these gay figured silks were in particular favour for use in the head-pieces of banners.[19]

Polychrome figured silks.

Chinese silk tapestry work is represented in the collection by only a small number of pieces, but these are all of exceptional fineness in technique and all hand-made with the needle. The value attached to such work is illustrated by the fact that twice we find small pieces of the identical fabric utilized in different head-pieces and manuscript-roll covers.[20] Gold is introduced into this tapestry work, just as in the case of certain embroideries, by means of paper covered with leaf-gold and then cut into very narrow strips, in accordance with a method which still prevails in the Far East.[21]

Silk tapestry work.

Of methods of decoration applied to finished textiles we find two plentifully illustrated among our fabrics. The embroideries, usually worked on a ground of silk gauze and in solid 'satin-stitch', show in most cases that perfection of careful workmanship which has survived in this class of Chinese needlework down to modern times.[22] Their floral designs are always purely Chinese in character. The same is the case also with most of the printed silks, which, however, in point of technical execution do not approach the standard of the other decorated textiles, even where the patterns imprinted are artistically pleasing.[23] In a few of the printed silks the design shows plainly the influence exercised by models derived from Western Asia, while the execution is obviously local. In the next section we shall have occasion to make special reference to these printed silk pieces, in view of the light they may throw upon interesting questions connected with the reproduction of 'Sassanian' textile motifs in China.[24]

Embroidery needlework.

Printed silks.

Section II.—CHINESE DESIGNS IN DECORATION OF TEXTILES

Neither the technique of our Ch'ien-fo-tung fabrics nor the methods employed for their ornamentation can claim such special archaeological interest as the designs appearing in their decoration and the styles of art to which these designs attach themselves. That silk-weaving in all its aspects had reached a high state of technical perfection in China thousands of years before

Antiquity of Chinese textile art.

etc., with Pl. CXVII, CXXI, CXXII. For silk gauzes with patterns, see, e.g., Ch. 00312–13, 00324, 00332, 00336, 00344, etc., with illustrations of design in Pl. CXX.

[19] A list of figured silk remains may be given here for facility of reference in connexion with the notes on designs in the next section (00 preceding numbers omitted): Ch. 009, 26, 61.a–4, 76, 118, 165, 168, 169, 171–82, 227, 230, 278, 295–7, 302, 359, 361–3, 365–9, 375, 432, 487; i. 0011, 20; liv. 005, and many pieces in 00279; lv. 0028. For reproductions in colour, see Pl. CVI, CVII; in monotone, Pl. CVIII–CXII.

With the figured silks may also be classed those few polychrome fabrics which on account of a peculiarity of technique in their texture (see remarks on Ch. 00170) have been distinguished as 'true brocades' in the Descriptive List, viz. Ch. 0065, 170 (Pl. LV), 228, 229 (Pl. CVI), 364, 481; lv. 0028. *3*.

[20] For complete pieces of a tapestry band, woven in a minute but interesting design, see the head-pieces Ch. 0058; lv. 0034 (Pl. CVI); for strips of tapestry in a somewhat larger scroll pattern, see Ch. 00166 and the manuscript-roll cover, xlviii. 001 (Pl. CVI). For smaller frs., cf. Ch. 00300–1 (Pl. CXII).

[21] Cf. Ch. 0058.

[22] For embroidered silks see Ch. 0075, 119, *259, *279–81, 332, *347, *348, 446, 448–50; *xxii. 0019; *xxvi. 002, *003, and *lv. 0028. *10, 11*; Pl. CVI, CVII, CX, CXI illustrate the pieces marked with an asterisk.

[23] Printed silk pieces are described under Ch. 00291–2, 304–10, 357–8, 360, 371–2, 376, 483; i. 0022; xxii. 0036; xxiv. 009; lv. 0028 (*15* and border), lxi. 005. For illustrations, see Pl. CVIII, CXIII, CXIV, CXVI. a, CXXII, CXXIII.

[24] See below, p. 910, with regard to Ch. 00291–2, 00357, reproduced in Pl. CXVI. A.

the chapel of the Thousand Buddhas was walled up is abundantly proved by historical evidence. Nor can there be any doubt either that the methods of weaving figured fabrics, of tapestry work and embroidery, were well known and of wide application from very early times both in the East and in the West.[1] But recent researches, largely stimulated by abundant finds of decorated fabrics in Egyptian graves of the late Hellenistic and Byzantine periods, have raised a variety of important questions bearing on the ancient silk industry both of the Near East and of China and on the interchange of art influences from both sides which it had helped to spread.[2] For the consideration of these questions the value of old and datable textile specimens coming from Central Asia or the Far East is obvious. Taking into account the period to which our Ch'ien-fo-tung textile relics belong, and of which the chronological limit is fixed in at least one direction, as well as the important geographical position occupied by Tun-huang on the Central-Asian high road along which overland trade between the silk-producing regions of China and the West has moved ever since its first opening, it will be clear that a careful study of the decorative designs displayed by our fabrics may well claim wider importance and interest.

Relations between silk industries of Near East and China.

To attempt their systematic discussion as a whole would be impossible for me here even if at the present time I had still access to the original materials and were able to consult all the publications which deal with related textile remains preserved in the West and Japan. But fortunately the interest presented by the designs of the Ch'ien-fo-tung fabrics was recognized by Mr. Andrews and myself from the first, and, effectively guided by the expert advice which Professor J. Strzygowski had been kind enough to give me in 1911, we were able to arrange in good time for the preparation of an adequate series of reproductions and drawings illustrating the more characteristic of our textile patterns. Executed with special care under Mr. Andrews' personal direction, these illustrations, embodied in Plate CVI–CXXIII, may be accepted as in all respects trustworthy.[3] The designs received special attention also in the detailed notes on individual fabrics which my artist collaborator and Miss Lorimer prepared for the Descriptive List. Besides contributing many of the entries concerning our decorated fabrics from Ch'ien-fo-tung, Miss Lorimer has also offered very valuable help by recording detailed references to certain decorative motifs familiar from 'Sassanian' and other early textile remains of the West, with which some of the designs represented among our fabrics are manifestly connected.

Decorated silk fabrics reproduced.

It is only with the help of the materials thus secured from two valued collaborators that I can now proceed to examine, firstly the plain differences of style observable in the designs of the Ch'ien-fo-tung fabrics, and secondly the questions which are thereby raised as to their places of production. Brief as my remarks must be, and restricted to points of essential archaeological interest, it will not be possible to avoid making some reference also to the effect which the ancient silk trade carried through Central Asia is likely to have had on the propagation of decorative textile motifs, and to the fresh light which the far older silk fabrics discovered on my third expedition are likely to throw on this question.

Points of archaeological interest.

[1] Cf. Falke, *Geschichte der Seidenweberei*, i. p. 5; also Migeon, *Les arts du tissu*, pp. 1 sq., 6. For references to other works dealing with the early history of silk-weaving, see Dalton, *Byzantine Art and Archaeology*, p. 583, note 2.

[2] To Professor J. Strzygowski belongs the merit of having first pointed out with intuitive emphasis the wide extent of the influence which the textile products of Īrān and of the regions linked with it in culture and political relations exercised for centuries, first upon the decorative arts of the Hellenistic East, and then upon those of Southern Europe. He also foreshadowed the nexus which future researches were likely to trace between the 'Sassanian' style of those fabrics and motifs originally derived by Persia from the Far East; cf. *Seidenstoffe aus Aegypten*, in *Jahrbuch der K. Preuss. Kunstsammlungen*, 1903, xxiv. pp. 147 sqq. For the importance of this source of Oriental influence on Byzantine and later Christian art, cf. also Diehl, *Manuel de l'art byzantin*, pp. 255 sqq., and Dalton, *Byzantine Art and Archaeology*, pp. 583 sqq., where full references to other works will be found.

[3] The drawings in Pl. CXVI. A, subsequently added in 1917, were produced under my own supervision.

The designs to be dealt with fall into two main classes, very unequally divided in numbers but both of considerable interest. To the first class, comprising the vast majority of all the specimens, belong the designs which are either of unmistakably Chinese style or else are composed of motifs likely to have been developed and applied in Chinese textile art without foreign influence. The second class is formed by designs which either display characteristic features of the style peculiar to the decorated fabrics produced in Īrān and the adjoining regions of the Near East during the period roughly corresponding to Sassanian rule, or else can be recognized as due to Chinese or other local imitation of 'Sassanian' patterns. It is mainly in connexion with this second class of designs that questions as to the origin of the fabrics which show them or as to the reasons explaining the imitation of those Western patterns far away in the East must arise and claim our attention. Designs of Chinese origin or derived from Īrān.

Designs of purely Chinese character predominate throughout our Ch'ien-fo-tung textiles, whichever of the above detailed methods (embroidery, figured weaving, etc.) may have been employed for their execution, and all considerations of local *milieu*, geographical position, and prevailing art influence combine to account for this plain fact. We have seen already that Tun-huang throughout its chequered history had retained the character of an essentially Chinese territory ever since the Great Wall of Han Wu-ti was extended to it. During a great portion of the period of over eleven hundred years which separates that first Chinese occupation of the oasis from the closing-up of the chapel at the Thousand Buddhas, the silk industry of China proper enjoyed what amounted to practical monopoly as far West as the Mediterranean. Even later its commercial predominance must have extended far into Central Asia, just as it still does in spite of so many great changes. Its hold upon this western outpost of the empire was obviously strengthened by the fact that through this passed the great trade route which served for long centuries as the main artery of the traffic carrying the silk fabrics of the Seres to the distant West. We have had repeated occasion to concern ourselves with the tangible relics which that ancient silk trade had left behind in the shape of finished textiles.[4] Designs of Chinese character prevail.

Even if any of the Central-Asian territories to which sericulture was extended in later times could possibly have competed in the quality of its silk fabrics and in output with the ancient home of the industry, a reference to the map shows that any appreciable export of their products as far east as Tun-huang would have been on commercial grounds as unlikely as it would be now. From Farghāna, Samarkand, and Bukhāra, the territories of ancient Sogdiana, where alone local conditions could have favoured the development of silk production on a moderately large scale, the distance to Tun-huang is nearly twice as great as from Ssŭ-chuan, one of the chief silk-producing provinces of China. To this must be added the fact that the difficulties of transport from the former across high mountains and mainly along desert routes are incomparably greater. The last observation applies also to Khotan, where silk-growing was introduced from China relatively early,[5] but where the quantity of silk produced and turned into textiles could never have been large. Tun-huang itself and the neighbouring tracts of westernmost Kan-su are climatically unsuited for sericulture. Hence it is impossible to ascribe a local origin to any of the silk fabrics with which we are concerned. But, in any case, there can be no doubt about the textile designs which must have appealed most to the local population. The paintings discussed in the preceding chapter and the frescoes of the cave-shrines to be described below furnish eloquent proof that the taste of this population was in all artistic matters distinctly Chinese. Silk textiles imported from China.

The particular archaeological value of our Ch'ien-fo-tung decorated fabrics is due, as already stated, to the fact that their approximate period of manufacture is known, or at least its *terminus ad quem*. It would hence be of special interest to compare the designs of Chinese style to be found in Comparison of textile designs.

[4] Cf. above, pp. 373 sq., 495, 700 sqq., 720, etc.

[5] Cf. *Ancient Khotan*, i. pp. 133 sq., 229 sq.

them with other specimens of early Chinese textile art. But this is a task which must necessarily remain beyond my scope here. Apart from other limitations it will suffice to point out that reference to publications which show approximately datable decorated fabrics to be found in the great Shōsōin collection (deposited in A.D. 749) and probably elsewhere in Japan is at present impossible to me, and that the study of the far more ancient decorated silks which my explorations of 1914 brought to light in abundance from cemeteries dating from Han times in the Lou-lan region is still far from being completed. Therefore I shall have to rest content with brief indications of the main types of Chinese design to be found among our Ch'ien-fo-tung textiles and with references to such characteristic specimens as help best to illustrate them. For all details as well as for references, necessarily very incomplete, to works showing old products of Chinese industrial art with similar designs the entries in the Descriptive List will have to be consulted.

Main types of Chinese designs.

Two main types may be distinguished among the decorative designs of Chinese character. One comprises floral motifs pure and simple characterized by a tendency, varying in degree but always recognizable, towards naturalistic treatment, and often combined with animal figures, mostly birds. The other type is composed of geometric designs having for their base mostly one or another of such well-known and widely spread motifs as the 'lozenge diaper' or 'repeating spot'. These motifs, too, often tend to become floral and even naturalistic in their application.[6]

Naturalistic floral designs in embroideries.

As regards the first type it is significant, but scarcely surprising, that we should find it represented in greatest freedom among the designs worked by embroidery; for obviously the needle of the embroiderer is not affected by the technical limitations which are bound to assure preference for designs more formal and conventionalized in the case of the products of the weaver's loom. In fact, all our embroidered fabrics show exclusively free floral design, though with considerable variations of motifs and arrangement. A comparison of the embroidery specimens repro-

[6] I take from an instructive note prepared by Miss Lorimer the following general observations on geometric designs among our fabrics:

'The geometric designs are based for the most part on one or other of two main motifs—the lozenge diaper or 'lattice-work', and the 'repeating spot'. In their simplest forms they are found chiefly in the damasks and gauzes, and on a small scale. In these the lattice-work is woven in plain thread-like lines, and the lozenges formed by it are empty or contain small inner lozenges or rosettes (e.g., Ch. 00440, 00503–5, and damasks of Ch. 00279; i. 0020; lv. 0028). Sometimes the junctions of the lattice-work are thickened by square spots or other ornaments producing a sort of octagonal diaper (Ch. 00312, Pl. CXX; Ch. liv. 005, Pl. CXXI); sometimes it breaks up into a complicated form of key-pattern (Ch. 00430. b, 00499–500). In a slightly different way it is sometimes formed of bands of chevron touching at their points and thus enclosing rows of lozenge-shaped spaces in which are rosettes (Ch. 00240; 00342. b, Pl. CXXI; 00489). Plain hexagonal diapers also occur, though less frequently (cf., e.g., the ground pattern of Ch. 00306, Pl. CXIII, and the hexagonal diaper formed of interlacing ellipses of Ch. 00338, Pl. CXXI; also damask of 00513). The repeating spot patterns consist of small quatrefoils (Ch. 00341, Pl. CXXI; damask of Ch. 00382); lozenges or groups of concentric lozenges (damask of Ch. 00280, 00340, Pl. CXXI); hexagonal spots (Ch. 00243, Pl. CXXI), and rosettes of various kinds (Ch. 00374; damask *13* of Ch. lv. 0028, etc.).

'In the gauzes, strictly geometric forms only are found; but in the polychrome figured silks and the printed silks both types of pattern are generally more elaborate and more floral in character. The diagonals of the lattice-work, for instance, may be formed of branches with leaves sprouting on either side and the junctions marked by large rosettes (Ch. 00227, Pl. CVI), or of scroll-like masses of leaves and flowers enclosing lozenge-shaped groups of the same. The latter type is found especially in the printed gauzes (e.g., Ch. 00307, Pl. CXIII). The repeating spots in the same way become more naturalistic and show a greater range of forms, including: circular rosettes with small rosette at centre or a double ray of large petals (Ch. 00173, Pl. CXI); rosettes with leaves radiating from between the petals and forming a halo round the flower (figured silks *2* and *3* of Ch. lv. 0028, Pl. CVII; printed silk Ch. 00308, Pl. CXIII); circular or lozenge-shaped masses of small flowers and leaves, common amongst the printed silks (e.g., Ch. 00309, Pl. CXIII; Ch. 00360, Pl. CXXIII); and many other forms. One figured silk, however, of excellent weave and quality, shows a pattern of plain repeating "hearts" (Ch. 00178, Pl. CXI).

'In their primary forms these patterns arise everywhere spontaneously, and likeness between any two on different sides of the globe is no proof of historical contact between the two countries. The lozenge and hexagonal diapers of the Stein silks and the repeating lozenge spot are certainly of

duced in Plates CVI–CVIII, CX, CXI will fully illustrate this.[7] Among them the cover Ch. xxii. 0019 (Plate CVI) with its bold design of trailing stems and multicoloured flowers, enlivened by flying birds, is certainly the finest as well as the best preserved. Of special excellence in harmonious composition and delicately executed design is the banner head-piece Ch. xxvi. 002 (Plate CXI), similarly well preserved.

Chinese designs in printed or stencilled fabrics.

We also find floral designs of considerable freedom and grace in their details among the printed fabrics of purely Chinese style, as a reference to certain pieces reproduced in Plates CVIII, CXIII, CXXII, CXXIII will show.[8] In the design of the patchwork border Ch. lv. 0028, reconstructed in Plate CXXII, the very naturalistic treatment of the graceful floral stems and the parrots clinging to them deserves special notice. The printed silk of the banner Ch. i. 0022 (Plate CXIII) in its round 'repeating spots' shows us an animal motif very characteristic of the Chinese type of design, in the shape of two birds, in this case cranes, whirling in a circle.[9] Patterns of a distinctly geometric type, composed of small rosettes forming a diaper, are seen in Ch. 00305, 00306, 00309 (Plate CXIII). With the printed silks may be classed also a small number of pieces from banners, decorated with stencilled designs of distinctly Chinese character.[10] Plate CXIII reproduces the most interesting of these designs. It shows two ducks facing within a lozenge of rich and naturalistically treated floral tracery, and in style and treatment is distinctly reminiscent of a fine painted design in the Shōsōin Collection.[11]

Chinese style in tapestry work.

Among designs produced on the loom the first place may well be allotted to those found in the few but remarkable specimens of tapestry work. Here too the style is purely Chinese, and the motifs mainly floral in character. But their treatment is distinctly stiffer and more conventionalized than in the former groups. Very striking is the design of the tapestry borders of the triangular head-pieces of banners Ch. 0058; lv. 0034 (Plate CVI), showing in minute execution a duck within a lotus pond, surrounded by floral ornament. Scrolls and formal palmettes seem to make up the pattern of the tapestry strips of Ch. 00166 and of the manuscript-roll cover xlviii. 001, reproduced in the same plate. This shows also the rich harmonious colouring and exceedingly fine texture which characterize these and the other few tapestry pieces. Among them Ch. 00300 (Plate CXII) and 00301 exhibit a fine floral and scroll design.

Polychrome figured silks of Chinese floral design.

A large and interesting group of designs is presented by the polychrome figured silks, comprising also a few fabrics which by their technique may be considered as true brocades.[12] There both naturalistically treated floral patterns and geometric ones in varying degrees of conventionalism are plentiful. Of the former Plate CVI reproduces several interesting specimens in colour. Most characteristically Chinese are, perhaps, the round 'spots' of Ch. 00228, formed by three birds whirling in a circle; to them the round pairs of lions chasing each other, in Ch. 00179 (Plate CXI, CXV), present a more conventionalized counterpart. In Ch. 00165. b (Plate CVI) we have a very

Chinese origin, as they find numerous parallels in the ornament of Han and pre-Han stone-reliefs, bronzes, and jades (see, e.g., the *Chin shih so*, p. 237 (hill-censer), p. 224 (vase); and many other instances in the *Po ku t'u*, *Kao ku t'u*, and *Ku yü t'u*), and one at least of the lozenge patterns plainly recalls the key-pattern diaper which is particularly characteristic of that period (Ch. 00430. b, 00500).'

[7] See Ch. xxii. 0019 and xxvi. 003 in Pl. CVI; lv. 0028. *10*, Pl. CVII–CVIII; Ch. 00259, 279, 347, 348, Pl. CX; Ch. xxvi. 002, Pl. CXI. For other embroidery remains, cf. Ch. 0075, 119, 280, 281, 332, 446, 448–50. a.

[8] See Ch. lv. 0028. *15*, and border in Pl. CVIII, CXXII; Ch. 00307, 308, 310; i. 0022; xxiv. 009, Pl. CXIII; Ch. 00358, 360, Pl. CXXIII. For other printed silks, cf. Ch. 00279. *4*, 371, 372, 376. a, 00483; xxii. 0036; lxi. 005.

[9] It is interesting to note that this printed silk bears an inscription written in Cursive Brāhmī script and, as Dr. Hoernle's transcript shows, in Khotanese language. The manner in which the date is recorded might suggest that the banner was offered by some votary from Khotan. But there is nothing to prove that the banner was brought from there.

[10] See Ch. 0024, 89, 303 (Pl. CXIII), 439.

[11] See Fenollosa, *Epochs of Chinese and Japanese Art*, i. plate opposite p. 110.

[12] Cf. Ch. 0065, 170 (Pl. LV), 228–9 (Pl. CVI), 364, 481 lv. 0028. *3*.

graceful design composed of rosettes, each of which is flanked by two pairs of life-like ducks.[13] The same plate shows in Ch. 00227, 229 purely floral designs of naturalistic type which are frequent also elsewhere among the figured silks.[14] We find a very interesting combination of naturalistic animal figures and flowers with more stylized forms in the fine figured silk band of the valance Ch. 00278 (Plate CIX), of which Plate CXIX shows the complete reconstructed design. The two pairs of galloping deer, admirably drawn in free movement, which form the most striking feature of each 'repeat', are characteristically Chinese and found also on textiles of the Shōsōin. The drawing below illustrates a similar combination, but with birds and conventionalized flowers, which is found in the design of Ch. 0076 (Plate CXI).[15]

Geometric designs in polychrome figured silks.

The 'geometric' designs found on polychrome figured silks also show considerable variety. The specimens reproduced in Plate CVII from the patchwork Ch. lv. 0028 will best help to illustrate the different stages leading up from such simple patterns as bands of vandykes, quatrefoils, plain rosettes, etc., to more elaborate lattice-work which is apt to become florid. Other specimens are seen in Plate CX–CXII.[16] For special notice may be singled out an elaborate pattern which recurs in a number of pieces with slight variations[17] and is best illustrated, perhaps, by the drawing of Ch. 00181 in Plate CXVI. A. It is composed of circular 'spots', containing an octagon surrounded by volutes and flower-shapes, and of four-armed 'spots' of similar ornate type in the interspaces. The design is very common among the Shōsōin objects of T'ang times, and is obviously Chinese.[18] It is hence of special interest that we also meet with it far away west in two fresco fragments from the ruined shrine of Khādalik.[19] That in one of these it stands side by side with an oval medallion of the 'Sassanian' type looks like a curious symbol of the double art influences from the Far East and the West, of which Khotan was always a meeting-place. As a simple but very striking pattern may be mentioned that of Ch. 00178 (Plate CXI), with its diagonal rows of crimson hearts on

Pattern of Figured Silk Ch. 0076
(Scale ½).

[13] For other specimens with similar motifs, differently used, see Ch. 0062. a, 168 (Pl. LV, CXVIII), 172 (Pl. CXI), 177. a (Pl. CXI).

[14] See e.g., in Pl. CVII, Ch. lv. 0028. *2*; Pl. CIX, 00278 (tab); Pl. CX, i. 0011, 20; Pl. CXII, 00165. a, 295, 296.

[15] See also Ch. 00175; lv. 0028. *5*, Pl. CVIII. The weave of Ch. 0076, a loose kind of satin twill, shows close resemblance to that of the valance band Ch. 00278, suggesting manufacture not far removed in place and period.

[16] See Ch. i. 0020 (lozenge of spots with octagon in centre), Pl. CX; 00171, 173, 174. a, 176. a, 178, 181 in Pl. CXI; Ch. 00174. b, 297–9 in Pl. CXII. For other geometrical patterns, cf. Ch. 00169–70 (Pl. LV), 362.

[17] Cf. Ch. 00171, 181; liv. 005 (Pl. CVI); lv. 0028. *1*, Pl. CVII; also printed in lv. 0028. *15*, Pl. CVIII.

[18] Cf. note on Ch. 00171 in Descriptive List, below, p. 972.

[19] See the drawing of Kha. i. c. 00119, reconstructed, in Pl. CXVI. A.

a golden yellow ground. A very interesting geometrical design is exhibited by the woven bands of silk which hold together the bamboo slips forming the material of the manuscript-roll cover Ch. xx. 006 (Plate CVI). The cover is relatively well preserved and has its *pendant* in the Shōsōin Collection. The material and a Chinese seal character woven into the design place Chinese workmanship beyond all doubt.

Geometric designs in monochrome fabrics.

When we turn to the group of monochrome figured silks or damasks, there is a distinct predominance of geometric designs, mostly of a simple type, to be noted. Only in a few damasks, such as Ch. 0086 (Plate CXVII) and xxviii. 007 (Plate CXXII), do we meet with elaborate floral and bird designs, and these, too, of a much stylized character.[20] Elsewhere such simple patterns as the concentric lozenges, chevrons, quatrefoils, scrolls, etc., illustrated in Plate CXXI, prevail.[21] There can be little doubt that this preference for relatively plain diapers is due to reasons of technique, and this explanation obviously applies still more to the gauzes, which show none but simple geometric designs, as seen in Plate CXX.[22] The appearance among these of Svastikas, crosses with angles filled in by squares, etc., set in lattice-work, might at first sight raise a suggestion of Western influence.[23] But the fact that the same motifs, like most of those used in the damasks, are to be found among the decorated silks of Han times which I recovered from the graves of Lou-lan places their early use in Chinese textile art beyond all doubt.

SECTION III.—DESIGNS OF 'SASSANIAN' TYPE AND THEIR IMITATIONS

Artistic penetration from the West.

The case is wholly different with the designs, forming the previously mentioned second class, which either in composition and execution attach themselves so closely to the style of 'Sassanian' textiles as to make Western origin probable for the fabrics displaying them, or else in their composition show unmistakable signs of having been produced under the influence of that style, even though by Chinese hands. Few as our specimens of this class are, they may claim special importance for the history of Eastern textile art; for they may help to throw light on 'complex phenomena of artistic penetration' in which 'textiles of portable nature have been transmitting agents'[1]—problems which in Central Asia and the Far East deserve quite as much attention as they have received further west.

Persian design imitated in Horiuji textile.

That Persian designs of 'Sassanian' type were imitated on figured silk fabrics produced in China during the seventh or early eighth century is a well-known fact, proved beyond all doubt by the famous Ito textile from the treasure of the Horiuji temple of Nara, where it had been deposited in A.D. 756.[2] The composition and a number of characteristic details of the hunting scene represented in its round medallions are as unmistakably Persian as the execution of the whole design and the ornamental motifs of the foliage in the interspaces are Chinese.[3] There is adequate

[20] See also Ch. 00293. a, Pl. CXVIII, with its fine figure of a peacock; for simple 'spots' showing pairs of birds, etc., see Ch. 00339, 343 in Pl. CXXI.

[21] For other floral or geometric designs in damasks, apart from those reproduced in Pl. CXXI, cf. Ch. 0065, 231–2 (Pl. CXII), 233–6, 238–50, 279, 280, 374, 429, 430, 440, 453–5; lv. 0028. *12–14*.

Ch. 00351 (Pl. CXVII) is of interest, as its pattern with interlacing stems and closed palmettes shows resemblance to the design of the damasks T. XIV. v. 0011. a, b (Pl. CXVII) which date from T'ang times; cf. above, p. 687.

[22] For other patterned gauzes, cf. Ch. 00324, 332, and the gauzes generally used for embroidered pieces.

[23] Thus Miss Lorimer in a general note had called attention to such patterns being common amongst the fabrics of Akhmīm and Antinoë and also those of Byzantine manufacture, with references to v. Falke, *Geschichte der Seidenweberei*, i. Figs. 32–4, 36, 83, etc.

[1] I borrow the pregnant expression used by M. Migeon as regards corresponding questions about the influence of Eastern decorative design upon the textile art of the Byzantine Empire; see *Les arts du tissu*, p. 6.

[2] Cf. Dalton, *Byzantine Art and Archaeology*, p. 591; for reproductions, see *Shōsōin Catalogue*, Pl. XCIV; Strzygowski, *Jahrbuch der K. Preuss. Kunstsammlungen*, xxiv. p. 169, Fig. 13; *Annales du Musée Guimet*, xxx. Pl. VI.

[3] For these interspace motifs, cf. the decorative patterns discussed above, p. 906, and illustrated by Ch. 00181, Pl. CXVI. A.

reason to believe that the reproduction of Persian and other Near-Eastern designs in Chinese textiles can be traced for centuries later.[4]

Persian fabrics brought to China.

While it is thus certain that specimens of decorative textile art as then produced in Persia and the adjoining regions must have already reached China in early T'ang times, many interesting questions remain open as to the territories from, and the routes by, which these Western figured fabrics were introduced; the extent to which they influenced Chinese taste; the conditions which led to the reproduction of their designs, apparently for export, etc. Though these questions cannot be taken up here for discussion in general, it is clear that for the sake of their elucidation hereafter our specimens deserve careful scrutiny.

Motifs in 'Sassanian' textiles.

Pairs of confronting beasts or birds form one of the most popular and persistent motifs in textiles of 'Sassanian' style, whether produced in Persia or outside it, while the framing of this motif and of other principal designs in medallions, round or oval and repeated over the whole surface of the fabric, is the regular and most characteristic feature of the Persian style of textile decoration.[5] We find this significant motif and the still more typical arrangement in medallions uniformly reproduced in a group of our figured silks, and as in each case indications of Chinese style and workmanship are totally absent, it seems to me impossible to doubt the Western origin of these fabrics.

'Sassanian' figured silk on manuscript-roll cover.

The most interesting among them is, perhaps, the excellently woven figured silk used for the border and bands of the manuscript-roll cover, Ch. xlviii. 001 (Plate CVI, CXI), and showing the design reproduced in the drawing of Plate CXVI. The design consists of large round medallions slightly compressed at the sides, each containing a pair of confronting winged lions on a palmette base, with smaller lozenge-shaped panels that are intended for conventional rosettes filling the interspaces. Medallions of nearly identical design, with the same highly stylized pair of lions strident, are found on two fine silk fabrics, of apparently identical texture and colouring, that are preserved in Europe. One of these is in the South Kensington Museum, while the other forms the 'suaire' of St. Colombe and St. Loup belonging to the treasure of Sens Cathedral.[6] The rosette in the interspaces is there replaced by pairs of hounds facing each other across a tree—the whole forming again a familiar 'Sassanian' motif. Among details of the medallion design common to all three fabrics, attention may be called only to the extreme rigidity of the animal pair, the border formed of a double ray of petals or leaves, and the stepped outlines throughout. All these are characteristic features of treatment peculiar to a group of Persian figured silks which Professor von Falke in his *Kunstgeschichte der Seidenweberei* distinguishes as of common origin and attributes to Khorāsān or the Oxus region.[7]

'Sassanian' designs in other fabrics of Western origin.

We meet again with the same rigid treatment of the animal pair and the stepped outlines in the designs of the silk banner tops Ch. 009 (Plates CXI, CXV) and Ch. 00359 (Plate CXV). The pattern of the former is completed by Ch. 00359. a, and shows elliptical medallions with a pair of

[4] Cf. Dalton, *Byzantine Art and Archaeology*, pp. 591, note 2; 592 sq., with references to Lessing, *Gewebesammlung des K. Kunstgewerbemuseums*, Berlin.

[5] Cf., e.g., Migeon, *Les arts du tissu*, p. 10.

[6] For the Sens 'suaire', cf. Chartraire, *Les tissus anciens du trésor de la cathédrale de Sens*, pp. 24 sqq., Fig. 20. Chanoine Chartraire produces evidence making it highly probable that the division of the 'suaire' into two halves dates from A.D. 853. Regarding the specimen at South Kensington, see below, Descriptive List, under xlviii. 001.

M. Chartraire, p. 26, in his very instructive publication has duly recognized the very close relation between the Sens 'suaire' and our Ch'ien-fo-tung fabric, of which other pieces are found similarly used on a manuscript-roll cover brought away by M. Pelliot and now at the Louvre.

[7] I take the references to this important publication from a general note of Miss Lorimer, not having access at present to the original. The group is illustrated there by Figs. 140–5. Prof. von Falke is inclined to date these fabrics from about the eighth to ninth centuries, but not earlier than A.D. 750.

confronting deer in each standing on a palmette base. Indented quatrefoil panels, each containing a pair of geese, fill the interspaces. The medallion border is ornamented here with elliptical discs, a motif very common among 'Sassanian' textile designs and their derivatives in general, and found also in others of our fabrics belonging to this group.[8] The border of the medallions in fragment (b) of Ch. 00359 shows again a different ornamentation, while the pair of ducks represented in them agree closely with the geese in the interspace panels of Ch. 009. Other specimens among our fabrics attributable to this group are Ch. 0026, 63, 375. They are small fragments of which the designs cannot be completely restored, but which show clearly corresponding features in the treatment of details.[9] It is worthy of note that in none of the designs of this group do we find that interlacing or linking of adjoining medallions which is very common in other 'Sassanian' designs and their derivatives, and appears also in another group of our 'Sassanian' textiles.[10]

The specimens just discussed are the only ones in our collection which in design and details of treatment are wholly of Western type. We can safely assume that they reached Ch'ien-fo-tung through Central Asia, and in view of this geographically obvious inference special interest attaches to the fact that Professor von Falke has been led to attribute to the exactly corresponding group of textiles in European collections an origin in the north-east of Īrān, including the Oxus region. I am not able at present to acquaint myself with the reasons that account for this view of the eminent expert. But, on the ground of wholly independent considerations of geographical and antiquarian nature, it appears to me very probable that those few undoubtedly Western pieces found among our Ch'ien-fo-tung fabrics were not brought there from Persia proper or the still more distant Near East, but are products of that wide Sogdian region extending from Farghāna to the Oxus. There are situated those ancient centres of industrial arts, Samarkand and Bukhāra, which from the very commencement of the overland silk export from China must have become great marts for this textile trade, and are likely to have developed at an early date their own silk manufacture also.[11]

Textile products from Oxus region.

It is neither possible nor necessary for me to explain here in detail the manifold relations which, ever since the first expansion of Chinese trade and policy westwards, linked ancient Sogdiana with the Tārīm Basin and the western confines of China proper. The abundant finds of Sogdian manuscripts both at Turfān and Tun-huang would alone suffice to attest them.[12] It may be difficult to trace the exact origin of the 'Sassanian' designs which reached the great silk manufacturing regions of China and were imitated there during T'ang times or before, when the far easier sea-borne trade with the West was already fully established. But, in the case of those few silk fabrics from the West which found their way into the walled-up chapel of Tun-huang, local production in that old Sogdian region, which by that time must have grown its own silk just as it does at present, appears to me on general grounds by far the most likely solution.[13]

Silk textile industry of Sogdiana.

[8] See Ch. 0026, 63, 375. The same decoration of the medallion border appears also in the Lion-stuff from the Sancta Sanctorum, now in the Vatican, which otherwise shows agreement with Prof. von Falke's Oxus group; see *Kunstgeschichte der Seidenweberei*, i. Fig. 139; Dalton, *Byzantine Art and Archaeology*, p. 593, Fig. 373.

[9] In Ch. 00375 the medallion contains a pair of birds, undetermined; in Ch. 0026 (Pl. CXII) apparently some plant motif.

[10] See, e.g., Migeon, *Les arts du tissu*, pp. 8, 13, 17, 19, 22; Dalton, *Byz. Art and Archaeology*, Figs. 368, 369; and Ch. 00182 (Pl. CXVIII), 00291–2 (Pl. CXVI. A).

[11] The important part played in the history of ancient silk trade and manufacture by Samarkand and Bukhāra has been briefly but very clearly indicated by M. Migeon, *Les arts du tissu*, p. 9.

[12] See above, pp. 675 sq., 818 sq.; also below, pp. 920 sq., and M. Pelliot's remarks, *J. Asiat.*, 1916, janvier–février, p. 123.

[13] No more than the briefest reference can be made here to the pieces of brocade-like silk fabrics with patterns of a 'Sassanian' type which my explorations of 1915 brought to light from numerous tombs of the seventh century near Astāna, Turfān. Closer examination has not yet been possible. They, too, must have come from the West. The great mass of other silk materials used for shrouds in these tombs seems to be of Chinese origin.

The fragment of a well-woven figured silk, E. i. 018,

Inter-relation of Persian and Chinese styles.

An interesting problem of interrelation of styles is presented by the design of Ch. 00230, of which Plates CVI, CXII show some of the numerous fragments, and Plate CXVIII the reconstructed pattern. In the large repeating 'spot' an elaborate bird and flower pattern, originally of the naturalistic type, appears to have been hardened into the rigidity of a geometric carpet-like design. The 'stepped' outlines observed throughout, both in the large 'spots' and the smaller rosettes, also highly conventionalized, which fill the interspaces, are certainly non-Chinese and recall the previously discussed group. In Ch. 00369 we have the fragment of another fabric showing exactly the same peculiarities in the character of design and treatment. Mr. Andrews has expressed the belief that in both pieces originally Chinese designs have undergone transformation, almost beyond recognition, at the hands of craftsmen working under the influence of Persian textile style, and this view appeals to me strongly. There is nothing to guide us, beyond what has already been stated, as to the region where this adaptation of a design of Chinese origin is likely to have taken place. But it is worthy of note that the vivid colouring of these pieces, with its strong contrasts of dark blue and white, bright yellow and green, is quite distinct both from the harmonious colour-schemes which characterize almost all Chinese fabrics in the collection, and from the generally dull tones prevailing in our 'Sassanian' group.

Printed silks with designs from 'Sassanian' models.

Clear evidence of that 'artistic penetration', but in the opposite direction, is presented by an interesting small group of printed silks with designs undoubtedly derived from Persian models, but modified through Chinese workmanship. The most characteristic among these designs is found on Ch. 00291–2 (Plate CXIII), pieces belonging to different banners but printed from the same well-cut block. Plate CXVI. A gives the complete design as far as it can be restored. Its chief feature is a large circular medallion of the characteristic 'Sassanian' type, enclosing in its lower half a pair of confronting deer with one foreleg lifted and stylized trees between them. The character of the design filling the upper half of the medallion unfortunately cannot be determined. But that it too contained a pair of animals appears highly probable both from the analogy of similar 'Sassanian' designs executed in the West[14] and from that of the printed silk Ch. 00357, also reproduced in Plate CXVI. A. The repeating medallions are decorated on their border with elliptical discs, also common in 'Sassanian' designs, and adjoin in vertical as well as horizontal rows. The square ornament which breaks the disc decoration of the border at the cardinal points finds its counterpart in the Ito silk from Horiuji.[15] The lozenge-shaped masses of foliage which fill the spandrels between the medallions are plainly of Chinese style, though less naturalistic in treatment than the corresponding foliage in the interspaces of Ch. 00304 (Plate CXIV). Distinctly Chinese, too, is the transformation of the palmette base below the animals' feet, which the 'Sassanian' prototype must have shown, into a cloud scroll. Nor is it possible to mistake the Chinese touch in the free movement and life-like drawing of the deer which appear with similar shape and attitude in a figured silk of the Shōsōin.[16] Even in the stiffly conventionalized form which the 'Hōm' tree between them retains, the influence of Chinese style is observable.

Printed design of pairs of confronting ponies.

There can be no possible doubt that the design of the block was made by Chinese hands in imitation of a 'Sassanian' pattern, but the inferior quality of the silk used does not lend support to the assumption that the fabric might have been specially intended for export westwards. The printing may well have been done in the Tun-huang region from a locally prepared block. This, at any rate, seems the most likely explanation in the case of the curious printed silk Ch. 00357

found in the shrine of Endere, shows also stepped outlines, but is too small to permit of a determination of the design; see *Ancient Khotan*, ii. Pl. LXXVII.

[14] See, e.g., Chartraire, *Les tissus anciens du trésor de la cathédrale de Sens*, p. 37, Fig. 42.

[15] Cf. above, p. 907, note 2, for references.

[16] See below, Descriptive List, p. 986; for a painted design of the same Collection, see also Fenollosa, *Epochs of Chinese and Japanese Art*, i. plate opposite p. 110.

(Plate CXVI. A), which has formed part of a banner. Its design shares with the one just discussed the double pair of confronting animal figures, here ponies, placed one above the other. But the characteristically 'Sassanian' medallion arrangement is absent. The most striking feature of the design is the spirited life-like rendering of the ponies' figures and the free trotting movement with which they are represented. This plain mark of Chinese workmanship is not obscured either by a certain roughness in the execution of the block or by the 'running' of the colours due to the thinness and poor texture of the silk. In the lower pair of ponies, with their short thick-set bodies, heavy heads, and short ears, the type peculiar to the Mongol horse, as I know it, is quite unmistakable. The pair above, with their spotted coats and heavy bellies, are meant evidently for a different type, which, however, owing to the missing heads, cannot be determined. The feet of a third pair appearing upside down at the lower edge of the piece show that the design was repeated in a reverse direction. What with Tibetan nomads immediately in the south and Turkish tribes to the north and east, such a 'horsy' design, if produced at Tun-huang, would have been specially suited to the taste of many customers supplied from the local market. Even now Tun-huang serves as the main distributing centre of industrial products for the Mongol and Tangut nomads that graze the high valleys and plateaus of Tsaidam.

'Sassanian' motifs adapted in Chinese silk fabrics.

We have a very instructive example of the adaptation of a Western textile motif by Chinese hands in the printed silk Ch. 00304. a, b (Plates CXIII, CXIV), which has been used in two head-pieces for banners. Its design consists of repeating circular medallions of large size enclosed by lozenge-shaped masses of elaborate foliage, which almost completely fill the interspaces. The double circular border, with its stiff decoration of elliptical discs outside and quatrefoils inside, is of distinctly 'Sassanian' type. But within the medallion we find elements which are as unmistakably Chinese: the four pairs of geese, quite naturalistic in treatment, around a central flower of somewhat more stylized character.[16a] Quite Chinese, too, is the treatment of the luxuriant foliage and flowers in the spandrels. The superior quality of the material and the carefully executed decoration suggest production in China proper. The same holds good certainly of the minutely worked figured silk piece Ch. 00182 (Plates CXI, CXVIII), which had served as a suspension loop. Its very small pattern shows circular medallions containing a pair of confronting ducks, with rosettes filling the interspaces and others covering the points where the circles touch. In its general outset the design is plainly of Persian type. But the extreme fineness of the work and some minor details of style leave no doubt that this fabric was woven in China. From the 'Sassanian' textiles of our first group it stands apart, not merely in the style of weaving, but also in the absence of stepped outlines and in the linking of the medallions. The latter, however, is otherwise a very common feature in Western specimens of 'Sassanian' textile design and its derivations.[17]

Figured silk, Ch. 00118, with griffins, wyverns, etc.

There still remains for our consideration a figured silk of very peculiar design, the character and relation of which might well appear puzzling at first sight. I mean the triangular piece Ch. 00118 (Plate CXI), made up of two fragments joined into what probably once served for the head-piece of a banner. The design, as seen in a drawing from Mr. Andrews' hand (p. 963),[17a] shows flat arches arranged in continuous rows and supported by shafts, which in turn rise from the summits of the arches in the row below. Within the panels thus produced we see standing one above the other two pairs of animals, either wyverns and griffins or wyverns and lions. The animals in each pair face each other across a central stem, which divides the panel vertically and,

[16a] We find the same motif of a confronting pair of ducks treated in Chinese style in the stencilled design of the silk banner Ch. 00303 (Pl. CXIII) and in the painted frontispiece of the big Brāhmī manuscript roll, Ch. c. 001 (Pl. CXLVI); cf. also the reproduction of a Shōsōin painting, Fenollosa, *loc. cit.*, i. p. 110.

[17] See, e.g., Migeon, *Les arts du tissu*, pp. 8, 13, 17, etc.

[17a] [For Mr. Andrews' analysis of this design, see now his paper referred to in note 19 below.]

forking at each end, forms an interlacing diaper passing over the whole surface. It is impossible not to realize the striking evidence of wholly Chinese style in the fantastic and yet strangely animated figures of the beasts as well as in a number of minor details, such as the curious hooked scroll which decorates the arches and closely resembles the conventional Chinese cloud type. If the arrangement of the pairs of confronting animals might at a first glance appear strangely reminiscent of some 'Sassanian' design, there is yet plenty to warn us against such a derivation. It is enough to look at the animal figures and the architectural motif in the panels, which could not possibly have been evolved from the stiff circle or oval of a supposed Persian model. On the other hand, the general treatment both of figures and of ornamental details suggests a connexion, difficult to define but all the same distinctly perceptible, with the style of the two figured silk fragments from sites of the ancient Tun-huang Limes, T. XV. a. iii. 0010. a and T. XXII. c. 0010. a, both reproduced in Plate LV.[18] A comparison of the Ch'ien-fo-tung fabric with the design of the latter fragment, as shown in Plate CXVIII, with its strange figures of dragons and phoenixes and its wave-scroll border, will best explain what is meant. To this may be added the fact that all three show the identical technique of weave (a variation of 'warp rib'), not found else among the Ch'ien-fo-tung silks, and the same restraint in the use of colours, one serving for the ground and a single other for the pattern.

Design resembling silk fabrics from Han Limes.

We owe what is likely to prove the true explanation of the puzzle to fresh and far more abundant finds of decorated textiles of early Chinese origin and to the advantage which Mr. Andrews has already been able to derive from their study, preliminary as it is. It was he who first called my attention to the important fact that, among the figured silks discovered by me in 1914 among the early Chinese cemetery remains of Lou-lan which go back to Han times, there are quite a number with designs which, on the one side, clearly attach themselves to the style of the fragments just discussed and, on the other, appear the likely precursors and harbingers of features we have so far been accustomed to treat as originating in 'Sassanian' textile style.[19] In particular we find there the motif of confronting animals fully established as a feature of decorative textile schemes. In Mr. Andrews' opinion the design of Ch. 00118, a unique piece in our collection of fabrics from Ch'ien-fo-tung, is as it were a survival from, or descendant of, that earlier Chinese style of textile decoration which has been first revealed by the fabrics discovered at Lou-lan.

Designs of figured silks from Lou-lan cemeteries.

It is impossible to discuss or to illustrate their evidence here. Consequently, in accepting the view just expressed, I must in part presume what has yet to be proved. But even thus I may use the occasion to point out that those fabrics discovered in Lou-lan grave pits are also likely to throw light on other problems of far wider interest connected with the ancient textile art of the East. Thoroughly Chinese in origin and style and showing remarkable perfection in technique and artistic taste, those figured silks afford ocular proof of the powerful influence which the products of early Chinese textile art must have carried westwards. Of the great commercial and even quasi-political importance which the trade with the silk brought from the distant Seres and exported to the Mediterranean regions acquired for the whole of Īrān in Parthian times, we are abundantly informed from historical sources. We know that Chinese textiles, not raw silk merely, were carried to Syria and even further west, to be there eventually unravelled and rewoven in occidental designs.[20] In the silks I discovered at Lop desert sites we possess actual specimens of the figured textiles which this trade brought from China. Archaeological evidence makes it certain that they belong to the

Early Chinese textile art in Lou-lan finds.

[18] For descriptions, see above, pp. 783, 785 sq.

[19] [For an analysis of selected specimens from these finds, see now Mr. Andrews' paper on *Ancient Chinese figured silks*, *Burlington Magazine*, 1920, xxxvii. pp. 6 sqq., with my account, *ibid.* pp. 3 sqq., of the first discovery of those fabrics in grave pits to the north-east of the Lou-lan Site.] Cf. also *Geogr. Journal*, xlviii. pp. 123 sq.

[20] The latter interesting fact is attested by an important passage of Pliny, *Historia nat.*, xi. 76; cf. Dalton, *Byz. Art and Archaeology*, p. 584.

first centuries of our era and that they were preserved for us, as it were in transit, along the very route which had served as the main channel for this trade since its first opening in the second century B.C.

Among them designs are frequent which clearly foreshadow features characteristic of the decorative style prevailing in Īrān and the adjoining regions during the Sassanian period. Their comparison creates a strong presumption that we touch here a source from which Persian art, and not merely that of the weaver, must have drawn much fresh inspiration since the first century B.C. That Chinese art in successive later periods has asserted a very powerful influence on Persian painting and ceramics is a fact well established by recent research and furnishing an exact parallel. It is impossible for me to follow up further the traces of the early 'artistic penetration' from the Far East to the West here assumed; that those ancient Chinese silks, so portable and so lasting, are likely to have provided the best transmitting agency for it is clear. But enough has been indicated already to justify the impression I received at the very time when they first came to light from that desolate Lou-lan site, that by their discovery 'there had opened up a new and fascinating chapter in the history of textile art'.

Influence of early Chinese textiles on Persian art.

Section IV.—MANUSCRIPTS FROM THE HIDDEN LIBRARY, IN BRĀHMĪ AND CHINESE

In Chapter XXII an account has already been given of the conditions in which I found the manuscript remains stored away in the walled-up chapel, and of the operations by which a considerable portion of this big deposit was secured for my collection. It will take many years before all these abundant new materials can be examined in detail and made fully accessible for philological and other researches. Even if their preliminary analysis and study, for which I had endeavoured from the very time of my return to England to secure the help of the most qualified experts, had already been completed, a systematic exposition of the results would fall beyond the scope of this publication as well as the limits of my competence. It appears, however, desirable for more than one reason to record here briefly the arrangements made for the first examination and cataloguing of the texts and documents in the different scripts and languages, and to pass in rapid review any indications that the preliminary labours already accomplished may furnish as to the sources from which the old monastic library had drawn its contents. Cursory and wholly inadequate as such a synopsis must be, it may claim some historical interest; for it will help to illustrate further that interchange of influences from varied regions, races, and creeds of which Tun-huang, owing to its geographical position, became pre-eminently the scene from Han times downwards.

Preliminary examination of MSS.

We may appropriately commence our survey with the manuscript remains in different forms of Brāhmī writing; for apart from special philological interest they possess the advantage of having been completely catalogued by Dr. Hoernle with the same painstaking care which has benefited so many manuscript finds in Brāhmī since the Central-Asian field was first opened to Indologist researches. As a reference to his classified list in Appendix *F* will show, these Brāhmī manuscripts comprise texts in three languages, Sanskrit, Khotanese, and Kuchean, while as regards their outer form they divide themselves into rolls and Pōthīs. The contents in all three languages are exclusively Buddhistic.

Manuscripts in Brāhmī script.

Taking the Sanskrit texts first, it may be noted that those in Pōthī form, nine altogether, have almost all been published or identified in the succession of articles which Professor de la Vallée Poussin was kind enough to devote to the Sanskrit portion of the collection.[1] Apart from frag-

Sanskrit texts in Pōthī form.

[1] Cf. L. de la Vallée Poussin, *Documents sanscrits de la seconde collection M. A. Stein, J.R.A.S.*, 1911, pp. 759 sqq., 1063 sqq.; 1912, pp. 355 sqq.; *Nouveaux fragments de la collection Stein*, 1913, pp. 843 sqq.

mentary portions of various canonical texts of the Mahāyāna, there are found among them leaves of the *Udānavarga* of Dharmatrāta [2] and a composition of Mātṛceta. The fact that the writing in all these Pōthīs is in the Slanting Gupta script, not found in Tun-huang manuscripts of obviously local origin, points to their having been Central-Asian imports. Indian origin is certain in the case of the large palm-leaf Pōthī, Ch. 0079. A, which contains in sixty-four folia about one-third of the *Prajñā-pāramitā* in the *Śatasāhasrikā* version, and also in that of the single palm-leaf, Ch. 0079. b, preserved out of what must have been a large Mahāyāna Sūtra text.[3] Both manuscripts are in Upright Gupta script and are likely to have reached Tun-huang through Tibet from the Nepālese side.

MS. rolls with Sanskrit texts.

Among the rolls with Sanskrit texts two, Ch. 0092 and Ch. 00330, deserve special mention. The first shows a portion of the *Nīlakaṇṭhadhāraṇī* with an interlinear Sogdian version. Since its publication by MM. de la Vallée Poussin and Gauthiot, M. Sylvain Lévi has suggested strong reasons for placing the date of this bilingual manuscript between A.D. 650–750.[4] The other roll contains a short version of the *Prajñā-pāramitā* in Sanskrit with a Chinese transliteration in alternate columns, both closely agreeing with a well-known Horiuji manuscript of the sixth century. Various Buddhist texts in corrupt Sanskrit are found written on the reverse of Chinese rolls,[5] a circumstance which together with the Cursive Gupta script points to their having been copied locally. Similar in language and character, but written in Upright Gupta, are most of the contents of the gigantic roll, Ch. c. 001,[6] over 70 feet long, while the rest are in Khotanese and Cursive Gupta script.

Pōthīs in Khotanese language.

Far more numerous are both Pōthīs and rolls containing texts in the language which after having been, during earlier stages of its study, designated variously as 'Unknown Language II', 'North-Aryan', 'Eastern Turkestānī', 'Eastern Īrānian', may conveniently be called now 'Khotanese' in accordance with the views arrived at by Dr. Hoernle, the pioneer of its study, and by Professor Sten Konow.[7] In my collection of Ch'ien-fo-tung manuscripts it is represented by some fourteen Pōthīs and thirty-one rolls, some complete, some fragmentary. In the case of the rolls one side of the paper almost invariably displays a Chinese text, wholly unconnected in character with the Brāhmī text on the other.[8] Both the Upright and Cursive Gupta scripts are found in the Khotanese texts. The most interesting among these are, perhaps, the two Pōthīs, both complete, containing the *Aparamitāyuḥ-sūtra* and the *Vajracchedikā* respectively.[9] Both being literal translations of well-known Buddhist texts available in their Sanskrit originals, they first supplied Dr. Hoernle with the means for the systematic interpretation of connected passages of Khotanese text,[10] and subsequently served Professor Sten Konow for his critical edition of these Khotanese versions.[11] Among other Khotanese Pōthīs which specimens reproduced in Plates CXLVIII–CL, CLII

[2] See for specimens, Pl. CXLIII.

[3] For specimens of both manuscripts, see Pl. CXLII.

[4] Cf. *J.R.A.S.*, 1912, pp. 629 sqq., 1063 sqq.

[5] See Ch. 0041, 0044 (Pl. CXLVII), 0047.

[6] Cf. Hoernle, *The 'Unknown Languages' of Eastern Turkestan*, II, *J.R.A.S.*, 1911, pp. 471 sqq.; for specimens, see Pl. CXLVI (where a portion of the roll has by mistake been reproduced topsy-turvy).

[7] Cf. *MS. Remains of Buddhist Literature*, ed. Hoernle, i. pp. x, 218 sqq. For earlier views as to the linguistic relation of this language, cf. also Pelliot, *Un fragment du Suvarṇaprabhāsasūtra*, *Mémoires de la Société de Linguistique*, xviii (reprint), pp. 1 sq.

[8] In Ch. 0045–6, 0049, 00271, 00331, where the Chinese writing on one side is wanting, the roll is fragmentary. In Ch. c. 002 there is clear proof that an old Chinese roll had been used on the reverse as an 'exercise book' in Brāhmī. It is probable that in the majority of the cases the Chinese side is the obverse, containing the earlier writing. But see also Pelliot, *loc. cit.*, p. 3. The roll Ch. ii. 001, which is incomplete, has Khotanese on both sides. This is the case also in cvi. 001, where the reverse bears in addition Tibetan writing, apparently contemporaneous.

[9] For specimens of the *Aparamitāyuḥ-sūtra*, Ch. xlvi. 0015, see Pl. CL; of the *Vajracchedikā*, Ch. 00275 + xlvi. 0012. a, in 44 foll., Pl. CXLIX; also *MS. Remains of Buddhist Literature*, i. Pl. V–XVI.

[10] Cf. Hoernle, *The 'Unknown Languages' of Eastern Turkestan*, *J.R.A.S.*, 1910, pp. 836, 1283 sqq.

[11] Cf. Sten Konow, *The Vajracchedikā and the Aparami-*

illustrate, it may suffice here to mention Ch. ii. 002, 003, which contain extensive portions, counting sixty-five and seventy-one folios respectively, of medical texts translated or extracted from Sanskrit originals, and Ch. 00274, a Buddhist text in thirty-nine folios, apparently complete but as yet unidentified.

Among the Khotanese rolls, written almost exclusively in Cursive Gupta, we find Buddhist texts, some of them of considerable length, statements of an apparently documentary nature, and also medical formulae.[12] Their number and the way in which the blank reverses of old Chinese manuscript rolls have been utilized for them leave little doubt about their having been written locally. That there were settled at Tun-huang Buddhist monks familiar with the language and script prevalent in the Khotan region and elsewhere in the south of the Tārīm Basin may thus be safely assumed, and various indications point to these Khotanese texts having been produced at a relatively late period.[13] But still more conclusive evidence that the Khotanese language was locally studied is supplied by the numerous alphabetic tables and syllabaries for the Cursive Gupta script which are contained among these rolls. As shown by Dr. Hoernle, who has very fully discussed these tables corresponding to the *siddham-chang* of Chinese Buddhist writers, they possess considerable value for determining the palaeography of a script rendered difficult by its generally very cursive, and often slovenly, character.[14]

Khotanese MS. rolls in Cursive Gupta script.

Alphabetic tables.

Sanskrit and Khotanese are not the only languages represented among our Brāhmī manuscripts from Ch'ien-fo-tung. Three folios, belonging to two different Pōthīs, Ch. 00316. a, b (Plate CLII), contain portions of text in that newly discovered Indo-European language which, first designated as the 'Language I', then identified with 'Tokhārī', has by a brilliant and convincing demonstration of M. Sylvain Lévi been proved to have had its principal home in the Kuchā region and can, in consequence, be justly called by the name of 'Kuchean'.[15] M. Sylvain Lévi, who at my request kindly examined our two Pōthī fragments, both written in Slanting Gupta, has identified them as belonging, one to a medical text, the other to a Buddhist poem bearing on the *Udānavarga*. Extracts from them have since been published and utilized by him and M. Meillet in a paper on the grammatical forms of Kuchean.[16] The disproportion in numbers between these few Kuchean leaves and the relatively plentiful Pōthīs and rolls in Khotanese which I gathered from the Ch'ien-fo-tung hoard is certainly striking. It may be premature to draw any definite conclusion from it until it is known what Kuchean materials, besides the three leaves of a bilingual medical text in Kuchean and Sanskrit specified by M. Sylvain Lévi,[17] rewarded M. Pelliot's search of the bundles

Kuchean manuscript remains.

táyuḥ Sūtra, the Old Khotanese Version together with the Sanskrit Text and the Tibetan Translation, etc. in *MS. Remains of Buddhist Literature*, ed. Hoernle, i. pp. 214–88, 289–356, resp.

[12] For specimens of such rolls, see Pl. CXLVII, CXLVIII. For Buddhist texts of great extent, cf. e.g. Ch. 0041, 00265–69.

[13] There is close resemblance both in style of writing and in language between the documentary rolls of Ch'ien-fo-tung and the Khotanese records brought to light by me at sites like Dandān-oilik, Khādalik, Mazār-tāgh, all occupied down to the end of the eighth century or later. On the other hand, indications derived from Chinese palaeography have similarly led M. Pelliot to assume a relatively late date, eighth to tenth century, for the numerous 'Eastern Īrānian', or Khotanese, manuscripts brought away by him from Ch'ien-fo-tung; cf. *Un fragment du Suvarṇaprabhāsasūtra, loc. cit.*, p. 3.

[14] Cf. Hoernle, *The 'Unknown Languages' of Eastern Turkestan, II, J.R.A.S.*, 1911, pp. 450 sqq.; Pl. I–IV. Such tables and syllabaries form the sole or principal contents of the rolls Ch. 0042, 46, 271, 273, 327; i. 0019; xl. 002, 003; lviii. 007 (Pl. CXLV); c. 002.

[15] Cf. Sylvain Lévi, *Le 'Tokharien B', langue de Koutcha, J. Asiat.*, sept.–octobre 1913, pp. 312 sqq. For a brief but lucid review of the researches bearing on this 'unknown' Central-Asian language, first rendered accessible for study by Dr. Hoernle's publication of the Weber-Macartney Manuscript (1901) and recognized in its true linguistic character by Professors Sieg and Siegling (1908), cf. Sylvain Lévi, *Étude des documents tokhariens de la Mission Pelliot, J. Asiat.*, mai–juin 1911, pp. 431 sqq.

[16] Cf. S. Lévi and A. Meillet, *Remarques sur les formes grammaticales de quelques textes en tokharien B*, in *Mémoires de la Société de Linguistique de Paris*, xviii. (reprint) pp. 2, 17, 21 sq.

[17] See S. Lévi, *J. Asiat.*, mai–juin 1911, p. 433. The absence of local 'site-marks' in the references made to other Kuchean materials from M. Pelliot's collection in MM. S. Lévi

I had been unable to examine closely or to remove during my visit to the Thousand Buddhas. But it certainly looks as if during the centuries before the walling-up of the monastic library the connexion of Tun-huang with the Buddhist communities south of the Taklamakān had been closer than with those in the northern oases from Turfān to Kuchā.

Collection of Chinese manuscripts.

The account given above in Chapter XXII will have shown that, notwithstanding my want of Sinologist knowledge, I realized from the first the importance of the masses of Chinese manuscripts which made up the main contents of the great hoard. Evidence secured through Chiang Ssŭ-yeh's help soon showed me the antiquarian interest of the miscellaneous local records and the often earlier origin of the broken manuscript remains which were to be found particularly in the mixed bundles. The special attention I paid to the acquisition of the latter has since been further justified by the fact that among them the proportion of lay texts with historical or philological value has proved much greater than among the compact bundles containing for the most part well-preserved rolls of Buddhist canonical literature. The number of individual rolls in the 270 odd regular bundles which I secured in the end in addition to previous 'selections' proved so great that, when at last in July, 1908, there was leisure to set Chiang Ssŭ-yeh to work at them, the weeks available before my final departure from Khotan sufficed only for a first rapid listing of less than a third of them. Even thus the rough inventory proved useful by showing that among the manuscripts then unrolled there were to be found dated colophons reaching back to the fifth century A.D. if not earlier.

Chinese manuscripts examined by Prof. Pelliot.

After the collection had been safely brought to the British Museum, nothing could be done for the examination of the Chinese manuscripts from Ch'ien-fo-tung filling twenty-four cases until in the early summer of 1910 Professor Pelliot to my great satisfaction came to London and devoted several weeks of unremitting labour to a rapid examination of those manuscripts. His exceptional qualifications as a Sinologist, and the unique experience gained through his preceding labours at the great *cache* itself, enabled him to arrive soon at a safe estimate of the general character and value of our materials in spite of their great mass. At my request Professor Pelliot was kind enough to sum up the main result of his observations in a brief but very instructive memorandum (reproduced below), and at the same time to express his readiness to undertake under certain conditions the preparation of a systematic inventory of our Chinese manuscripts from Tun-huang. I felt most grateful for this arrangement, which promised within a reasonable time to render this important part of our collection fully accessible to research through the work of the scholar best qualified for the task. The proposal soon received also the sanction of the India Office and the British Museum Trustees, into whose possession all Chinese manuscripts brought back from my expedition were ultimately to pass.

Arrangements for cataloguing Chinese MSS.

In the autumn of 1910 a first instalment of manuscripts was duly transmitted to Professor Pelliot at Paris for the purpose of being catalogued. But, owing to personal circumstances and the pressure of other scientific tasks, their inventory had not been completed by the summer of 1914, when the outbreak of the war called Professor Pelliot to military duty in the French Army. As on account of other obligations he was unable to resume these labours, the preparation of a detailed catalogue was undertaken by Dr. L. Giles at the British Museum.[17a] Meanwhile this portion of the collection having attracted due attention in Japan, several very competent scholars, such as Professor Kano and Mr. Taki in 1912–13 and Mr. Yabuki in 1916, had devoted

and Meillet's just-quoted paper makes it impossible for me to determine which of them came from Ch'ien-fo-tung and which from Duldul-ākhur and other Kuchā sites.

[[17a] At the time of going to press over 2,000 separate manuscripts have already been catalogued.]

considerable time and labour to the examination of particular manuscripts, especially such as have a special bearing on Buddhist iconography and kindred studies.

Chinese texts of antiquarian interest.

Out of these thousands of manuscripts only two texts, short but of distinct historical and geographical interest, have so far been published. Both owe their edition and translation with valuable notes to Dr. Lionel Giles of the British Museum. One, the *Tun-huang lu*, is a succinct treatise on the *mirabilia* of the Tun-huang district, dating from the close of the T'ang period. It has proved useful by its topographical indications and been repeatedly referred to above.[18] The other, Ch. 922, contains a fragmentary original record of the official census of Tun-huang taken in A.D. 416.[19] Preserved in the form of a small roll of which the reverse has been utilized in T'ang times or later for some Buddhist text, it affords a good illustration of the valuable 'finds' which may yet be expected among the masses of miscellaneous papers rescued from the 'mixed bundles'. From another and larger text, Ch. 917 (Plate CLXIX) written in A.D. 886 and containing notes on the geography of Central Asia, Professor Pelliot has used interesting extracts in his paper dealing with early Sogdian colonies in the Lop region.[20]

Gratifying as these few publications are, they must make me wish more than ever that a systematic encouragement and expansion of Far-Eastern researches in England and elsewhere may soon provide an adequate number of Sinologists duly qualified by critical training and capable of turning to good use the wealth of these new materials, which in the end may prove not only the most numerous, but also the most valuable, of all literary remains I recovered from the walled-up chapel. Meanwhile I must feel glad that the following extract from Professor Pelliot's above-mentioned memorandum makes it possible to record here the opinion of a most competent scholar as to the extent and value of our Chinese manuscript collection from Tun-huang:

M. Pelliot's memo. on Chinese MSS.

'Les manuscrits chinois rapportés de Touan-houang par le Dr. Stein peuvent se diviser au point de vue d'un inventaire en deux catégories:

1° Les rouleaux manuscrits complets ou de dimensions assez considérables, environ 3,000 manuscrits.

2° Les pièces détachées ou fragments, de 5,000 à 6,000.

'On pourrait être tenté de n'inventorier que la première catégorie. Mais ce serait retirer au travail toute partie scientifique, toute base sérieuse. En grande majorité les manuscrits complets appartiennent à des œuvres bouddhiques que nous possédons dans les éditions chinoises et japonaises du Canon bouddhique, et ces manuscrits seront naturellement très précieux, étant les plus anciens, pour des études de détail sur ces ouvrages; mais dans l'ensemble ils nous apportent relativement peu d'informations nouvelles immédiatement utilisables. Il en est autrement pour les pièces (actes d'ordination, baux, comptes), souvent datées, qui se rapportent à tous les actes de la vie locale, et qui représentent une catégorie de documents dont, avant les découvertes de Touan-houang, nous n'avons pour ainsi dire aucun spécimen.

'Enfin, c'est parmi les fragments que se trouvent le plus souvent les textes de la littérature laïque, fragments historiques, géographiques, lexicographiques, etc., qui sont de la plus haute importance pour le progrès des études de sinologie érudite.

'Même sommaire, l'inventaire, pour avoir quelque utilité, devra dans la mesure du possible indiquer la nature du texte quand le titre ne pourra être déterminé. Il devra utiliser tous les colophons et, en leur absence, indiquer une date approximative pour l'écriture du manuscrit. Ce travail, pour l'ensemble des documents, prendra certainement une année.'

Notes on specimens of Chinese MSS.

It will help to illustrate Professor Pelliot's remarks, and to show the wide range of subjects represented among our Ch'ien-fo-tung texts, if I append here the notes which he and Dr. Lionel Giles have been kind enough to furnish regarding the manuscripts reproduced in Plates CLXVI–CLXIX. To their friendly help is also due the selection of these specimens which on account of their exactly fixed dates, their palaeographic features or contents, or for other reasons may claim some special

[18] See Giles, *Tun-huang Lu*, *J.R.A.S.*, 1914, pp. 703 sqq.; with supplements and corrections in *J.R.A.S.*, 1915, pp. 41 sqq. For references, see above, pp. 620, 623, 716, 734; for a reproduction of two pages of the booklet, Ch. 1073, see Pl. CLXIX.

[19] See Giles, *A Census of Tun-huang*, *T'oung-pao*, 1915, pp. 468 sqq. Reproduced in Pl. CLXVI below, where by mistake mainly the later writing of the reverse instead of the original text of the obverse has been shown.

[20] See *J. Asiat.*, janvier-février 1916, pp. 120 sqq.

interest. I may add here that descriptive notes, provided mainly by Dr. Giles, on a larger selection of Ch'ien-fo-tung manuscripts which were on view during the Exhibition of portions of my Collection held in 1914, will be found in the *Guide* then published by the British Museum.[21]

NOTES ON CH'IEN-FO-TUNG MSS. REPRODUCED IN PLATES CLXVI–CLXIX.

Ch. 922. Fr. of Chinese MS. roll, containing a census of families in the province of Tun-huang. Dated the first moon of the twelfth year of the period *Chien-ch'u* (February–March, A.D. 416). [The portion seen opened in the reproduction shows the reverse used for a later Buddhist text.] Pl. CLXVI.

Ch. 916. Buddhist stanzas celebrating the joys of Sukhāvatī, the sacred mountain Wu-t'ai-shan, etc. Undated; probably written about A.D. 800. Pl. CLXVI.

Ch. 1181. Buddhist canonical text; contains chap. I of *Mahāvaipulyadhāraṇī-sūtra.* Dated A.D. 521. Pl. CLXVI.

Ch. 759. Manuscript roll containing part of the *Lieh Kuo Chuan*, a Chinese historical romance dealing with the feudal states of the Chou dynasty. Pl. CLXVI.

Ch. 936. Rolled document containing official report from the frontier-city of Su-chou. Pl. CLXVII.

Ch. cv. 001. Complete MS. roll, containing chap. IX of *Mahāparinirvāṇa-sūtra*, with stamps of San-chieh Monastery (see above, p. 822) at end. Undated; probably of seventh century. Pl. CLXVII.

Ch. 905. Fr. of MS. roll, containing a number of short Chinese poems, apparently written by a Buddhist monk, celebrating various mountains, rivers, and monasteries. T'ang period. Pl. CLXVII.

Ch. 935. MS. roll containing an itinerary from K'ai-fêng Fu to the regions of the extreme West. Pl. CLXVII.

Ch. 6. MS. roll showing end of chap. V of the *P'u-yao-ching* (Samantaprabhāsa-sūtra; corresponds to No. 160 of Nanjio's *Catalogue*, but with a different division). The manuscript is undated; but Prof. Pelliot considers its writing more archaic than that of the Wei period and places its date about A.D. 400, an opinion fully accepted by Messrs. Kano and Taki. Pl. CLXVIII.

Ch. 401. Colophon of fine MS. roll, containing chap. III of *Hua yen ching* (Buddhāvataṃsaka-sūtra), dated eighth day of fourth moon of third year of *Chêng-kuang* May 18, A.D. 522). Pl. CLXVIII.

Ch. 478. MS. roll, containing chap. I of *Shê lun chang*, a Buddhist text with commentary, dated September 30, A.D. 601. Pl. CLXVIII.

Ch. 365. Portion of document, recording a list of pious gifts and dated A.D. 991. Typical writing of decadent period of Chinese culture at Tun-huang. Pl. CLXVIII.

Ch. 1283. Will of a nun, named Ling-hui, written on her death-bed and dated twenty-third day of tenth moon of sixth year of *Hsien-t'ung* (Nov. 15, A.D. 865). Pl. CLXVIII.

Ch. 79. End of MS. roll containing text of *Vajracchedikā*, incomplete at beginning. Typical writing of middle of T'ang period (about A.D. 750–800). Attached to end of roll is a colophon taken from an earlier manuscript written A.D. 700 by Yin Jên-hsieh, whose name recurs in other Tun-huang manuscripts (Pelliot). Pl. CLXVIII.

Ch. 1024. Fr. of well-written MS. containing one of the 'Four Books' (*Ta hsüeh*). Pl. CLXIX.

Ch. 1073. Booklet containing the *Tun-huang lu*, a short descriptive account of the Tun-huang tract, mainly concerned with its *mirabilia*; see above, p. 917. Probably written in tenth century. Pl. CLXIX.

Ch. 1080. Five leaves of ink-rubbings from the inscription of Ou-yang Hsün, famous in Chinese calligraphy, made up into booklet. Two more leaves brought to Paris (Pelliot). Pl. CLXIX.

Ch. 917. MS. roll, incomplete at the beginning, containing a treatise on Central-Asian geography, dated A.D. 886. See above, p. 917. Pl. CLXIX.

Oldest printed book, A.D. 868.

In conclusion special reference deserves to be made here to the complete printed roll Ch. ciii. 0014 (Plate C), 16 feet long, containing the Chinese version of *Vajracchedikā*, which we had already occasion to mention above on account of its block-printed frontispiece.[22] According to its colophon the roll was printed by Wang Chieh on the fifteenth day of the fourth moon of the ninth year of *Hsien-tung*, corresponding to May 11, A.D. 868. It is the oldest specimen of printing so far known to exist, apart from charms.[23]

[21] Cf. *Exhibition of Stein Collection*, pp. 53–8.

[22] See above, p. 893.

[23] For printed prayer-sheets, Ch. 00158, 185. a, dated A.D. 947, see Pl. C, CIII; for others of same date and later in tenth century, cf. Pelliot, *Une Bibliothèque médiévale*, *B.É.F.E.O.*, viii. p. 526.

Section V.—MANUSCRIPTS IN TIBETAN, SOGDIAN, TURKISH

It seems appropriate to proceed next to the manuscripts in Tibetan, the mass of which is second only to that of the Chinese. As originally secured from the cave, they filled over thirty compact bundles, besides many packets of Pōthīs found in miscellaneous bundles and generally mixed up in utter confusion.[1] The total number of individual Pōthīs, rolls, and other manuscripts may be estimated at about 800.[1a] My ignorance of Tibetan would not have allowed any systematic selection, even if the conditions of acquisition had been different from what they were. But for the reasons previously explained I endeavoured in the first place to secure whatever Pōthīs and other materials in Tibetan turned up in 'miscellaneous' bundles. The very appearance of the writing suggested that the vast majority of the Pōthīs, rolls, etc., were likely to contain portions of the Tibetan Buddhist Canon or other religious texts. This assumption was fully confirmed by the first examination which Dr. F. W. Thomas and, under his guidance, Miss Ridding were kind enough to make of the manuscripts. It also showed that the suspicion roused in me by the look of certain big convolutes of large sheets,[2] which had to be taken *en bloc* with other closely tied-up bundles, was only too well justified. Their contents, made up mainly of endless *Prajñā-pāramitā* copies and the like, help merely to illustrate the fatal attraction which the frequent repetition of certain particularly cherished texts or prayers, as a quasi-mechanical method for accumulating spiritual merit, seems to have had evidently since early times for Tibetan piety. *Tibetan manuscripts.*

Since under a decision arrived at in 1910 the whole of the Tibetan manuscripts from Ch'ien-fo-tung were handed over to the India Office Library for final deposit, Dr. Thomas as its Librarian charged himself with the arrangements for having them systematically catalogued. These labours, commenced by Miss Ridding but mainly effected since 1914 through Professor de la Vallée Poussin's efforts, have now, I understand, been carried to completion. In the Introduction to his catalogue, the publication of which may be hoped for in due course, M. de la Vallée Poussin has furnished a valuable synopsis of the chief results arrived at. Meanwhile I feel grateful for the notes Dr. Thomas has been kind enough to furnish on the manuscript specimens reproduced in Plates CLXXIII, CLXXIV.[3] *Cataloguing of Tibetan manuscripts.*

It appears reasonable to assume that a great portion, if not the bulk, of the Tibetan manuscripts found at Ch'ien-fo-tung belongs to the period when the region of Tun-huang was under Tibetan domination, from the middle of the eighth to the middle of the ninth century A.D. This relatively early date justifies the hope that, well-known as most of the texts may be from their being included in the Tibetan Canon, the manuscripts will yet furnish materials repaying close study when the time comes for textual criticism of the vast Buddhist literature of Tibet. As soon as the mass of these manuscripts is duly arranged, comparison with them of the fragments of Tibetan Buddhist texts found at such approximately datable sites as Khādalik, Endere, and the fort of Mīrān ought to prove interesting in more than one respect. *Approximate period of Tibetan manuscripts.*

Another direction, too, may be suggested for research likely to yield useful results. While the Tibetan manuscripts in roll form are generally written on paper similar to that of inferior make which is used in the Chinese texts and documents of the ninth–tenth century, the material in many of the Pōthīs seemed to me of a different and distinctly better make, recalling paper made from the fibres of a *Daphne* plant, such as the modern paper still manufactured in Nepāl, and first found in a manuscript excavated by me at Endere.[4] If microscopical analysis of such paper specimens and *Paper used in Tibetan manuscripts.*

[1] For a specimen of such a mixed packet of Pōthī leaves, see Ch. 03, Pl. CLXXIV.

[1a] Excluding very numerous duplicates of certain texts.

[2] For a specimen, see Ch. 05, Pl. CLXXIII.

[3] See below, Appendix I.

[4] Cf. *Ancient Khotan*, i. p. 426.

of the method used for their 'sizing' were to bear out this impression, a safe criterion would be gained for distinguishing manuscripts produced in Tibet from those of local origin.

Tibetan Pōthīs, rolls, 'concertina-shaped' booklets.

There can be little doubt that, just as the Pōthī form prevalent in Tibetan manuscripts is directly derived from India, so the use of rolls may be due to the imitation of Chinese models. The same appears probable also in the case of those Tibetan manuscripts, not infrequent at Ch'ien-fo-tung, which take the form of long narrow booklets made up by the folding of sheets after the fashion of block-printed Chinese books or the bellows of a concertina.[5] The method seems obviously one which may have originated in China through the adaptation to paper of the arrangement likely to have been used in fastening up into book-form the narrow bamboo or wooden slips of the ancient Chinese stationery.[6]

Sogdian manuscripts.

In a geographical sense nothing, perhaps, illustrates better the variety of cross-currents of Buddhist propaganda once meeting at Tun-huang than the fact that, among the manuscripts from the Thousand Buddhas' cave, there have also come to light texts in the language of ancient Sogdiana and written in the script which is derived from the Aramaic through the intermediary of the cursive form of this writing preserved in our early Sogdian documents. In my collection the Sogdian contribution to the old monastic library of Ch'ien-fo-tung is represented by about a dozen manuscripts, mostly rolls or fragments of such, but including also some Pōthī leaves to be presently mentioned.[7] Ever since the distinctive character of these remains of Sogdian text was recognized in 1910 with the help of Sir D. Ross, I was anxious to secure their examination by Professor F. W. K. Müller, who first discovered remains of Sogdian language in manuscript fragments of Buddhist, Manichaean, and Christian character brought back from Turfān by Professor Grünwedel's expedition. From the photographs transmitted to him of a number of our Sogdian rolls, Professor F. W. K. Müller was able to identify two texts, one in the large roll Ch. ci. 001 as containing a Buddhist metaphysical treatise, and the other, Ch. 0050, as a portion of the fifth and sixth chapters of the *Padmacintāmaṇi-dhāraṇī-sūtra*, of which a version made in A.D. 695–700 is to be found in the Chinese Tripiṭaka. These first results of his searching examination were kindly communicated by him towards the close of 1910.

Sogdian manuscripts examined by M. Gauthiot.

Fulfilment of the hope subsequently raised of securing from this leading expert a preliminary account, and eventually also the complete publication of the above texts, was prevented by circumstances evidently due to pressure of other tasks. Therefore arrangements were made in 1913 with M. Gauthiot, who had meanwhile, by his highly successful labours on the materials contained in M. Pelliot's collection, established his position as an authority of the first rank on Sogdian and other Eastern Īrānian researches. In 1912 he had already been able to utilize the five Pōthī leaves of a Sogdian version of the Vessantara Jātaka found in our collection [8] for the masterly edition and translation of this text prepared mainly from the more extensive portion of the identical Pōthī which M. Pelliot's search had brought to light.[9] In the same year he also published, in collaboration with Professor de la Vallée Poussin, the manuscript of the *Nīlakaṇṭhadhāraṇī*, Ch. 0092, in Sanskrit with interlinear transcription in Sogdian.[10] But the hopes of seeing our other texts, too, all mostly Buddhist it seems, elucidated by this highly gifted and devoted collaborator

[5] My attention was first called to these Tibetan booklets by a note of Prof. de la Vallée Poussin, who has used for them the graphic term of 'concertina'. Similar booklets are met with also among our Chinese manuscripts from Ch'ien-fo-tung; see e.g. Ch. Nos. 686, 1364.

[6] Cf. above, pp. 764 sqq.

[7] For brief descriptions of the outer features of these Sogdian manuscripts, see List below, p. 924.

[8] For specimens of these large leaves written on excellent yellowish paper of the T'ang period, see Ch. 0093. a, b, Pl. CLVIII.

[9] Cf. Gauthiot, *Une version sogdienne du Vessantara Jātaka*, *Journal Asiat.*, janvier–février, mai–juin, 1912, pp. 163–93, 429–510.

[10] Cf. *J.R.A.S.*, 1912, pp. 629 sqq.; also above, p. 914.

were frustrated by the outbreak of the war, and finally destroyed by his lamented death, which took place in 1916.

It is impossible to foresee when and where a competent scholar may be found capable of continuing the labours which were so brilliantly begun by M. Gauthiot on the Sogdian texts of Ch'ien-fo-tung. In the meantime it must suffice here to call attention to a point which presents a distinct antiquarian interest. The paper and outer appearance of the Sogdian rolls resemble so closely that of our Chinese texts of the T'ang period from the cave that local production in Tun-huang or the adjoining region suggests itself at least as a possibility. This assumption would well agree with what M. Pelliot has been able to prove from historical notices among Ch'ien-fo-tung manuscripts as to the existence of Sogdian colonies in the Lop tract, and probably eastwards also.[11] It is, therefore, of importance to note that, according to an observation kindly communicated to me by Professor F. W. K. Müller in the autumn of 1910, the Sogdian Buddhist text in the big roll Ch. ci. 001 shows distinct evidence of having been either translated from a Chinese version or at least prepared with the help of Chinese materials.[12]

Manuscripts in Turkish language.

We still have briefly to survey those manuscript remains which, though showing different scripts, are all in Turkish language. In regard to these it is particularly gratifying to know that those texts among them which are the most interesting by their contents and writing, and in all probability also the oldest, have been fully published and adequately elucidated through the care of exceptionally qualified experts. The place of honour may justly be accorded to the remains in Turkish 'Runic' script, on account of their intrinsic philological value and the fact that it was Professor V. Thomsen, the famous decipherer of that script, first discovered in the Orkhon and Yenissei inscriptions, who did me the honour of undertaking their publication. The remains are few in number; but among them is what in Professor Thomsen's words 'must decidedly be characterized as the most remarkable, comprehensive, and also best preserved of all the MSS. found hitherto written in the Turkish Runic script'.[13]

Divination book in Turkish 'Runic' script.

The little book, Ch. 0033, written on fifty-eight leaves of excellent paper of the T'ang period and in a fine calligraphic hand, is complete from beginning to end, including the colophon.[14] Its state of preservation is perfect, not even the glue which fastens the sheets at the back having loosened. The text, as Professor Thomsen's translation and comments show, comprises sixty-five concise stories and was composed primarily for the purpose of a divination book (called *ïrq-bitig*, 'fortune-book', in the text itself). The linguistic interest of the text is great, both 'on account of the rich supply of words contained in it' and because there is strong internal evidence to prove that, unlike most, if not all, early Turkish text fragments in this script so far found, it is not a translation from another language. In Professor Thomsen's opinion most outer and inner criteria speak in favour of its being of Manichaean origin, and the great care bestowed on the neat writing, both of text and of rubrics, certainly creates this impression. The cyclical date given in the colophon cannot be exactly determined; but Professor Thomsen is inclined to assign the manuscript approximately to the beginning of the ninth century. In the colophon the scribe names two students, evidently Manichaeans, 'staying at the residence (or the college ?) of Taigüntan', a locality which still awaits identification.

[11] Cf. Pelliot, *Le 'Cha tcheou tou tou fou t'ou king'*, etc., *Journal Asiat.*, janvier-février, 1916 pp. 115 sqq. Cf. also above, pp. 306, 327, 654.

[12] With this may be compared M. Gauthiot's remarks on the very close relation existing between the Sogdian text of the *Dīrghanakha-sūtra* published by him from a Ch'ien-fo-tung manuscript in the Pelliot collection and the Chinese translation of the same by I-tsing dating from the beginning of the eighth century A.D.; see Gauthiot, *Le Sūtra du religieux Ongles-longs*, *Mémoires de la Société de Linguistique*, 1912, xvii (reprint), p. 2.

[13] Cf. Thomsen, *Dr. M. A. Stein's manuscripts in Turkish 'Runic' script from Miran and Tun-huang*, *J.R.A.S.*, 1912, pp. 190 sqq.

[14] For the reproduction of four double pages, see Pl. CLX; for two more, *J.R.A.S.*, 1912, Pl. II.

Other MS. remains in 'Runic' Turkish script.

A literary character, both in contents and writing, appertains also to the three fragments, Ch. 0014, which all belonged to one treatise, evidently of a religious or moral character.[15] Of a different and distinctly curious nature is the apparently complete document Ch. 00183, written very plainly, but by an evidently unpractised hand.[16] In it the writer, probably an officer, 'bearing the rather high-sounding name of Baghatur Chigshi, pronounces in angry terms his discontent' with the commissariat arrangements made for a certain chief and his followers, 'thirty men of rank and consideration'. Both in wording and in writing the little record conveys a refreshing touch of actuality from the times when the Chinese of the Tun-huang oasis had troublesome visitors from the Turkish tribes dominating the north and north-east.

Turkish Manichaean manuscript.

A very valuable Turkish manuscript of a type not otherwise represented in my collection is the fine roll Ch. 0015, over 14 feet long, written in the Manichaean variety of Estrangelo and containing in 338 lines by far the greatest portion of the *Khuastuanift*, or confession prayer of the Manichaeans.[17] Professor von Lecoq, the distinguished Turcologist, first recognized the character of this beautifully clear manuscript, and at my request published it completely, with translation and commentary, supplementing from Turfān fragments now at Berlin most of the first two articles, which our text lacks out of the total of fifteen.[18] For observations on the particular critical value of the manuscript and on the importance of the text itself, previously known to this extent only from a Turfān manuscript in the difficult Uigur writing, I may refer to Professor von Lecoq's pages.[19]

Manichaeans at Turfān and Tun-huang.

The discoveries at Turfān sites have furnished abundant reason for the belief that Manichaean and Buddhist worship had existed there peaceably side by side among a population which had come relatively early under Turkish domination as well as racial influence. Considering how close Uigur power was established to Tun-huang, both in the north and in the westernmost marches of Kan-su, it can cause no surprise that among all the thousands of Buddhist sacred texts deposited in the cave there should have survived also a manuscript relic of Mani's church. The latter is likely enough to have had followers among the local colonies from the Central-Asian north and west, just as Tun-huang town nowadays, in spite of its thorough Chinese character, has its small settlement of Muhammadan traders, carriers, etc., from Turfān, Charkhlik, and other western oases. But there can be no longer any doubt that Manichaean propaganda had in T'ang times secured a firm foothold also in China itself. This fact, long suspected from scattered indications, has now been established by Chinese Manichaean texts found at Ch'ien-fo-tung. During his search at the cave M. Pelliot had already discovered a fragment of a Chinese treatise manifestly setting forth points of Manichaean doctrine.[20] Subsequently there came to light, among the remains of the walled-up library which had found their way to Peking, a Manichaean work in Chinese, first published by Mr. Lo Chên-yü and since translated and annotated by MM. Chavannes and Pelliot.[21] Nor has our collection failed to yield up a contribution of this kind; for in a well-preserved Chinese roll, resembling a Buddhist Sūtra text in outer appearance, M. Yabuki in 1916 discovered an extensive treatise which he declares to be Manichaean and of considerable importance.[22]

Chinese Manichaean texts from Ch'ien-fo-tung.

[15] Cf. Thomsen, *J.R.A.S.*, 1912, pp. 215 sqq.; see Pl. CLXI.

[16] See Pl. CLXI; cf. Thomsen, *J.R.A.S.*, 1912, pp. 218 sqq.

[17] For specimens from the roll, including the colophon, see Pl. CLXII.

[18] See A. von Lecoq, *Dr. Stein's Turkish Khuastuanift from Tun-huang*, etc., *J.R.A.S.*, 1911, pp. 277–314, with plates reproducing the whole of our roll.

[19] He points out in particular: 'Its excellent state of preservation, and the fact of its being written in the clear unequivocal letters of the Manichaean alphabet, render this manuscript a most valuable help to all interested in the study of the ancient Turkish speech;' see *J.R.A.S.*, 1911, p. 277.

[20] Cf. *B.É.F.E.O.*, viii. p. 518 (reprint *La Mission Pelliot*, p. 36).

[21] Cf. Chavannes-Pelliot, *Un traité manichéen retrouvé en Chine*, *J. Asiat.*, novembre–décembre 1911, pp. 499–617.

[22] Mr. Yabuki refers to this discovery in his preliminary report (Japanese) *Tonkō-chihō-shutsu kosha-butten kaisetsu moku roku*, Tokyo, 1917; also in his letter of July 27, 1917, to me.

Uigur texts and records.

It only remains for us now briefly to notice the literary relics in Turkish language and Uigur script that I was able to recover from the above deposit. In 1909 Dr. (now Sir) Denison Ross expressed the eager wish to undertake the elaboration of these materials. Whatever information regarding them can be offered here is derived solely from such notes as he kindly communicated to me between 1910–13 in the course of the protracted studies which he devoted to certain of these texts. Our Uigur materials consist partly of texts or records, written on rolls mostly fragmentary and some with Chinese text on the obverse, and partly of written books.[23] Of the rolls it is impossible to state more at present than that their contents, as far as they are not records, are taken from Buddhist religious literature. Of the large roll, Ch. 0013, it is of interest to note that its reverse bears some characters in Runic Turkish script, evidence of a relatively early date. Among the texts in book-form, which are all in remarkably good preservation, Dr. Ross had recognized from the first Ch. xix. 001 (Plate CLXIII) as comprising a super-commentary on Sthiramati's commentary on Vasubandhu's *Abhidharmakośa*, a standard treatise on Buddhist metaphysics, the whole apparently translated from Chinese versions. Another portion of the same work is found in the booklet, Ch. xix. 002 (Plate CLXIV), making up altogether some 250 folios. With the assistance of Professor Stcherbatskoi, Dr. Ross devoted assiduous labours at Calcutta to the preparation of an edition of this treatise which, it is hoped, he may yet be able to publish. Of mixed contents is apparently the booklet Ch. xxvii. 002 (Plate CLXIV). In all the above, Chinese terms and phrases appear frequently interspersed among the Uigur text.

Uigur manuscript books.

Probable later date of Uigur manuscript books.

The peculiar type of the writing, closely resembling that used for Mongolian, and the thin paper of these books, unlike any found in other manuscripts from the cave, seemed from the first to suggest a later date. But the problem here implied first assumed a definite form when Dr. (now Sir D.) Ross, while at work in 1912 on another booklet, Ch. xix. 003 (Plate CLXV), discovered in its colophon a date which he believes to correspond to the year A.D. 1350.[23a] I have already had occasion to refer to the circumstances explaining the apparent discrepancy between the relatively late origin thus made likely for our Uigur books and the date which the mass of concordant archaeological evidence obliges us to assume for the closing-up of the cave.[24] In full accord with the view taken by M. Pelliot and communicated by him to Dr. Ross,[25] I see strong reasons for the belief that these books, so different in make-up and type of writing from other Uigur relics in our respective collections, do not belong to the originally discovered hoard, but were obtained by Wang Tao-shih when he cleared most of the small grottoes of the northern group fully half a mile off. These undoubtedly belong to the Mongol period, and in two of them, still untouched, M. Pelliot himself subsequently brought to light manuscript and print fragments clearly dating from the thirteenth–fourteenth centuries.[26] I may specially note in conclusion that those Uigur texts in book-form were found by me not embedded in regular manuscript packets like the rolls, but lying open to view on the top of loose miscellaneous bundles.

[23] For specimens of Uigur rolls and books, see Pl. CLXIV, CLXV. It is hoped that it may be possible hereafter to secure from Sir D. Ross's competent hand brief notes on these texts and fragments, of which the Descriptive List gives merely a rough inventory; for rolls, cf. Ch. 0013, 13. a, 00282–4, 00287–8, 00290–1; lviii. 0012. a–f.

[23a] [For Dr. Haneda's confirmatory reading, see *Add. & Corr.*]

[24] Cf. above, p. 828 sq.

[25] Cf. Ross, *The Caves of the Thousand Buddhas*, *J.R.A.S.*, 1913, pp. 434 sqq.

[26] Cf. Pelliot, *B.É.F.E.O.*, viii. p. 529, note 1.

SECTION VI.—LIST OF SOGDIAN AND TURKISH MANUSCRIPTS FROM CH'IEN-FO-TUNG

I. SOGDIAN MANUSCRIPTS

Ch. 0050. Part of Sogdian MS. roll, on thick brownish paper. *Obv.* 77 ll. Sogdian, with ruled lines and margins as for Chin. Sūtra; black, regular hand, good condition; contains the *Padmacintāmaṇi-dhāraṇī*. *Rev.* 62 cols. Chin., black with red punctuations. 2′ 11″ × 10⅛″.

Ch. 0092. Bilingual MS. roll (Brāhmī and Sogdian), containing last part of the *Nīlakaṇṭhadhāraṇī*; see Hoernle, Appendix *F*, and De la Vallée Poussin and Gauthiot, *J.R.A.S.*, 1912, p. 629 sqq.

Ch. 0093. a. Fr. of Sogdian MS.; four long narrow fols. and a half, numbered respectively 8, 13, 14, 20, and 4; stiff deep yellow crackly paper, written on each side. Clear black writing in excellent condition; contains a version of the *Vessantara Jātaka*. See Gauthiot, *Journal Asiatique*, 1912, pp. 163 and 429. Complete fol. 1′ 6¾″ × 5¾″. Pl. CLVIII.

Ch. 0093. b. Fr. of Sogdian MS.; one fol., long, narrow, and on brownish paper of the same kind as Ch. 0093. a. Written on each side in clear black hand, but writing heavier and lines more closely set than in the preceding. Page no. at top. 1′ 6¾″ × 5¾″. Pl. CLVIII.

Ch. 00285. Fr. of Sogdian MS. roll, on thick soft yellowish paper. *Obv.* part of Chin. Buddhist Sūtra. *Rev.* Sogdian letter in 19 ll. large clear writing, somewhat faded but thoroughly legible; 4 ll. Sogdian also on obv., over Chin. 1′ 5″ × 10⅜″.

Ch. 00286. Sogdian MS., on coarse whitish paper showing 'laid' marks. *Obv.* letter in 21 ll. Sogdian, clear black writing. *Rev.* parts of 3 ll. 1′ 4⅜″ × 11⅜″.

Ch. 00289. Fr. of Sogdian MS., on flimsy greyish mulberry-bark (?) paper. *Obv.* 10 ll. heavy black writing. *Rev.* blank. 9″ (incomplete) × 10½″.

Ch. 00334. Fr. of Sogdian MS. roll, on thick brownish paper. *Obv.* part of Chin. Buddhist Sūtra. *Rev.* 14 ll. Sogdian, some incomplete; large clear writing, less regular than in some of the other manuscripts. 9½″ (gr. length) × 10½″.

Ch. 00335. Fr. of Sogdian MS. roll, on thick brownish paper, discoloured. *Obv.* part of Chin. Buddhist Sūtra. *Rev.* 9 ll. (fragmentary) Sogdian, large clear, somewhat irregular hand. 10⅜″ × 5⅝″ (gr. length).

Ch. 00349. Fr. of Sogdian MS., on flimsy grey mulberry-bark (?) paper. *Obv.* 16 ll. Sogdian, heavy black, regular hand. *Rev.* 5 chars. Chin. Good condition. 10½″ (incomplete) × 11⅜″.

Ch. 00352. Part of Sogdian MS. roll, incomplete each end, on thick light buff paper; good condition. *Obv.* 208 ll. Sogdian, clear black regular writing between ruled lines and margins; contains the *Vimalakīrtinirdeśa*. *Rev.* covered with close-set ll. Chin. 9′ 7″ × 10½″.

Ch. 00353. Part of Sogdian MS. roll, on somewhat crackly yellowish paper; good condition. *Obv.* 294 ll. Sogdian, clear black regular writing between ruled lines and margins. *Rev.* at one end, 21 ll. large and 9 (fragmentary) ll. small, Chin. 12′ × 10″.

Ch. 00354. Fr. of Sogdian MS. roll, thick brownish paper. *Obv.* 29 ll. writing, clear, black. *Rev.* blank. Good condition. 1′ 4″ × 9¾″.

Ch. ci. 001. Sogdian MS. roll (incomplete each end), on thick yellow paper; good condition. *Obv.* 402 ll. Sogdian, clear black regular writing between ruled cols. and margins; contains Buddhist metaphysical text. *Rev.*, at one end, two separate ll. Sogdian and one l. Chin. 17′ 3″ × 10″.

II. RUNIC-TURKISH MANUSCRIPTS

Ch. 0014. a–f. Six frs. of Runic Turkish MS., on thick light buff paper. *b* and *c*, and *e* and *f*, join. Writing on each, clean, regular, and perfectly preserved; written on guide-lines between margins like Chin. Sūtra. *Obv.* (*a*) 14 ll. Turkish (3 ll. fragmentary); (*b–c*) 7 ll. fragmentary; (*d*) 5 ll. fragmentary; (*e–f*) 5 ll. fragmentary; smudged with ink powder, but legible. Contents of a religious or philosophical nature. *Rev.*—on all frs., and between Turkish ll. on obv.—Chin. chars of later date. See Thomsen, *J.R.A.S.*, 1912, p. 215. Gr. fr. (*a*) 12¼″ × 12¼″. Pl. CLXI.

Ch. 0033. Runic-Turkish MS. book; complete and in excellent condition. Consists of 58 leaves strong brownish paper; each two leaves formed of one small sheet doubled, and pasted (not sewn) at back. No cover or pagination. Turkish text begins on rev. of fifth leaf (p. 1) and finishes on obv. of fifty-seventh leaf (p. 104) in red-ink postscript or colophon. Initial five leaves, and final three leaves, originally blank, covered with Chin. writing encroaching on Turkish text. The latter is written with extreme regularity and neatness in black, with red punctuation; and is arranged in 65 paragraphs, distinguished by a species of numbering in groups of small circles, and containing each a short story or description. Apparently a book for explaining omens. See Thomsen, *J.R.A.S.*, 1912, pp. 190 sqq.

The Chin. text contains Buddhist verses on the life of Śākyamuni (before the Turkish text), and on the 'boat' for sons of Buddha (after the Turkish text), boat being

metaphorical for *Prajñā-pāramitā*. (Fol.) $5\frac{3}{8}'' \times 3\frac{1}{4}''$. Pl. CLX.

Ch. 0053. Fr. of Runic-Turkish MS., on light buff paper. *Obv.* remains of 2 ll. only, both incomplete. *Rev.* blank. $7\frac{1}{2}'' \times$ (gr. m.) $1\frac{1}{4}''$.

Ch. 00183. MS. in Runic-Turkish, on thick brownish paper; good condition. *Obv.* Tib. Buddhist text (?). *Rev.* in R. upper corner, letter in 12 ll., Turkish; contains account of arrangements for military staff, and complaints about commissariat, by officer (?) Baghatur Chigshi. See Thomsen, *J.R.A.S.*, 1912, p. 218. $1' 3'' \times 9\frac{1}{4}''$. Pl. CLXI.

III. TURKISH MANICHAEAN TEXT.

Ch. 0015. Turkish Manichaean roll, on stout brownish paper somewhat polished on surface; with wooden roller. Writing black, clear, and regular, with punctuation in black outlined red. Contains confession-prayer of Manichaean Auditores. See von Lecoq, *J.R.A.S.*, 1911, pp. 277 sqq. $14' 6'' \times 4''$. Pl. CLXII.

IV. UIGUR MANUSCRIPTS

Ch. 0013. Uigur MS. roll; brownish paper; 466 ll. thick black writing; good condition, except at beginning which is incomplete. Contains Buddhist Sūtra entitled *Säkiz yükmäk* (?) *bögülük arviš*. On *rev.* a few chars. of Runic-Turkish. $24' 9\frac{1}{2}'' \times 10\frac{3}{8}''$.

Ch. 0013. a. Fr. of Uigur MS., on coarse light brown paper, found in Ch. 0013. Inscr. in large ill-formed hand with fr. (12 ll.) of *dhāraṇī*. $7\frac{1}{2}'' \times 11\frac{3}{4}''$.

Ch. 00282. Fr. of Chin.-Uigur MS. roll, on firm yellowish paper. *Obv.* part of Chin. *Prajñā-pāramitā*. *Rev.* 29 ll. Uigur in three groups; different hands but all large scrawling, and one l. Chin. Seems to refer to presentation by writer of white and scarlet shawls to some institution in the town of Bükü (?). $2' 1\frac{1}{2}'' \times 10''$.

Ch. 00282. a. Fr. of Uigur MS., on soft pale grey paper. On one side part of 5, on the other part of 3 ll. Uigur; large heavy writing of blotted appearance. Relates to white and scarlet shawls like the preceding. $7'' \times 11\frac{7}{8}''$.

Ch. 00283. Fr. of Chin.-Uigur MS. roll, on soft yellowish paper. *Obv.* part of Chin. *Vajracchedikā*. *Rev.* 14 ll. Uigur in three groups; containing phrases such as *qutluq tängrim* in a large ill-formed hand, having the appearance of writing exercises by a beginner. First l. seems to read: *täki ilik uighur χa(n)*. $1' 6'' \times 9\frac{3}{4}''$.

Ch. 00284. Fr. of Uigur MS., on pale-grey paper like Ch. 0013. a. *Obv.* 13 ll., *rev.* 6 ll., Uigur in large thick hand. $8\frac{3}{4}'' \times 11\frac{5}{8}''$.

Ch. 00287. Fr. of Chin.-Uigur MS.; firm brownish paper. *Obv.* part of Chin. *Vimalakīrti-sūtra*, and one l. Uigur along top. *Rev.* 27 ll. Uigur in heavy, and one l. in light, hand; containing invocation to the Triratna, Buddhas, Bodhisattvas, etc., repeated twice. Perhaps a writing exercise. Some holes, but condition otherwise good. $1' 4\frac{1}{2}'' \times 10\frac{5}{8}''$.

Ch. 00288. Fr. of Uigur MS., on thick brown paper. Torn at edges and patched in antiquity. *Obv.* parts of 19 ll. Uigur (5 in red, much faded; remainder in black). *Rev.* 20 ll., black; even writing. Red ll. contain title of Sūtra, Sukhāvatīvyūha (?). $11'' \times 8''$.

Ch. 00290. Fr. of Chin.-Uigur MS., soft yellowish paper. *Obv.* part of Chin. *Vajracchedikā*. *Rev.* 4 ll. Uigur across whole roll, and 3 short ll. in one corner. Large heavy writing. The second note speaks of the *Türk sav* or Turkish language. $9'' \times 10''$.

Ch. 00291. Fr. of Uigur MS.; thick brownish paper, incomplete all sides; parts of 11 ll. Uigur in regular hand on each side, from tr. of Jātaka. One sentence says: 'The Khan's son entered the sea.' $7'' \times 6''$.

Ch. xix. 001. Uigur MS. book; of thin light buff paper (each page double), sewn, with pasted paper cover. On *obv.* of cover, one l. Chin. and a few scattered chars. Chin. Contains: (i) Commentary on Sthiramati's commentary on the *Abhidharmakośa* of Vasubandhu; 149 numbered leaves (Chinese numerals); (ii) 15 leaves, new pagination; various comments including passages from the *Saddharma-puṇḍarīka*, with Chinese colophon and seal. Two blank leaves at end. Uigur inscr. on inside of cover, beginning and end; and Chin. chars. and seal on top of leaves as shut. Good condition. Size of leaf $6\frac{5}{8}'' \times 4\frac{3}{4}''$ to $5''$. Pl. CLXIII.

Ch. xix. 002. Uigur MS. book; on thin paper, leaves double, sewn; incomplete and without cover. Contains continuation of the super-commentary on the *Abhidharma-kośa*; leaves numbered 25–105 (Chinese numerals). Good condition. $7\frac{1}{2}'' \times 5\frac{5}{8}''$. Pl. CLXIV.

Ch. xix. 003. Uigur MS. book; thick buff paper, sewn, incomplete and no cover; 63 leaves, unnumbered. Fols. 1–58 inscr. in small hand, with inch margin left at top and bottom and outer edge of page, but not ruled. Fols. 59–63 in larger hand, with no margins. Pp. 46 *a* and *b* contain interesting colophon with date corresponding to 1350 A.D.; see *J.R.A.S.*, 1913, pp. 81, 434. [Cf. also below, *Add. & Corr.*] Good condition. $5\frac{7}{8}'' \times 5\frac{1}{8}''$. Pl. CLXV.

Ch. xxvii. 002. Uigur MS. book; of thick light buff paper, sewn, no cover; 38 leaves, unnumbered; inch margin ruled at top and bottom of page. Scattered lines only of Uigur on outside page, beginning and end. Inside: mixed contents, including poetry. $7\frac{3}{4}'' \times 5\frac{7}{8}''$. Pl. CLXIV.

Ch. lviii. 0012. a–f. Six frs. of Uigur (?) MS., on smooth light buff paper; belonging to same manuscript. Show on *obv.* respectively 12, 11, 6, 7, 7, and 6 ll. regular black clear writing. *Rev.* blank. Gr. fr. (*a*) $6\frac{1}{2}'' \times 5''$.

CHAPTER XXV

CAVE-TEMPLES AND ANTIQUES OF THE THOUSAND BUDDHAS

Section I.—DECORATIVE ART IN SOME CH'IEN-FO-TUNG SHRINES

It was only after my immediate labours at the great hoard of the hidden chapel had ended that I was able to turn my attention to a closer examination of at least some of the other cave-temples and of their mural paintings. A description of the observations made in them may hence serve as a fit conclusion also to the account of my work at Ch'ien-fo-tung and of the relics I was able to carry away.

No detailed survey possible.

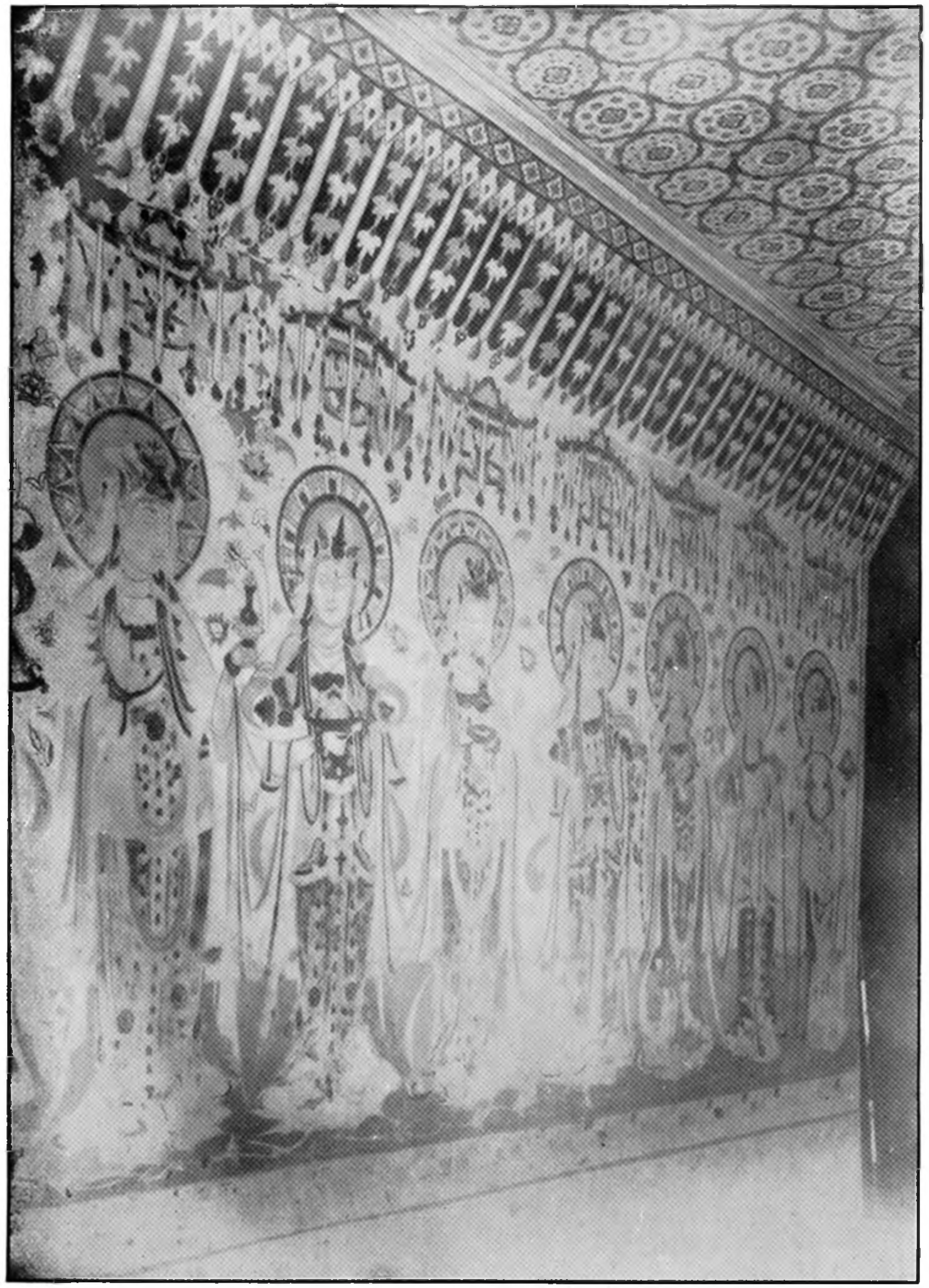
The general account I have given in Chapter XXI of the site and its great array of cave-temples would alone suffice to explain why it was impossible for me to attempt anything like a detailed survey of these hundreds of rock-cut shrines. Quite apart from the very limited time which regard for the summer programme of geographical exploration in the Nan-shan ranges left available to me, I realized fully that for a task of this magnitude special qualifications would have been needed, as well as technical help such as I did not command. Without Sinologue knowledge and sufficient familiarity with Buddhist iconography as developed in China I could not hope to secure proper guidance to the interpretation of all this vast display of wall-paintings, and still less to find clues for determining their chronological sequence and that of the shrines they adorned. At the same time I sadly lacked the technical experience and trained help needed for obtaining, within reasonable time limits, photographic reproductions of all the more notable paintings and sculptures and for gaining access to those grottoes which, high up on the cliff, could not be safely approached without special arrangements.[1]

Difficulties of photographic record.

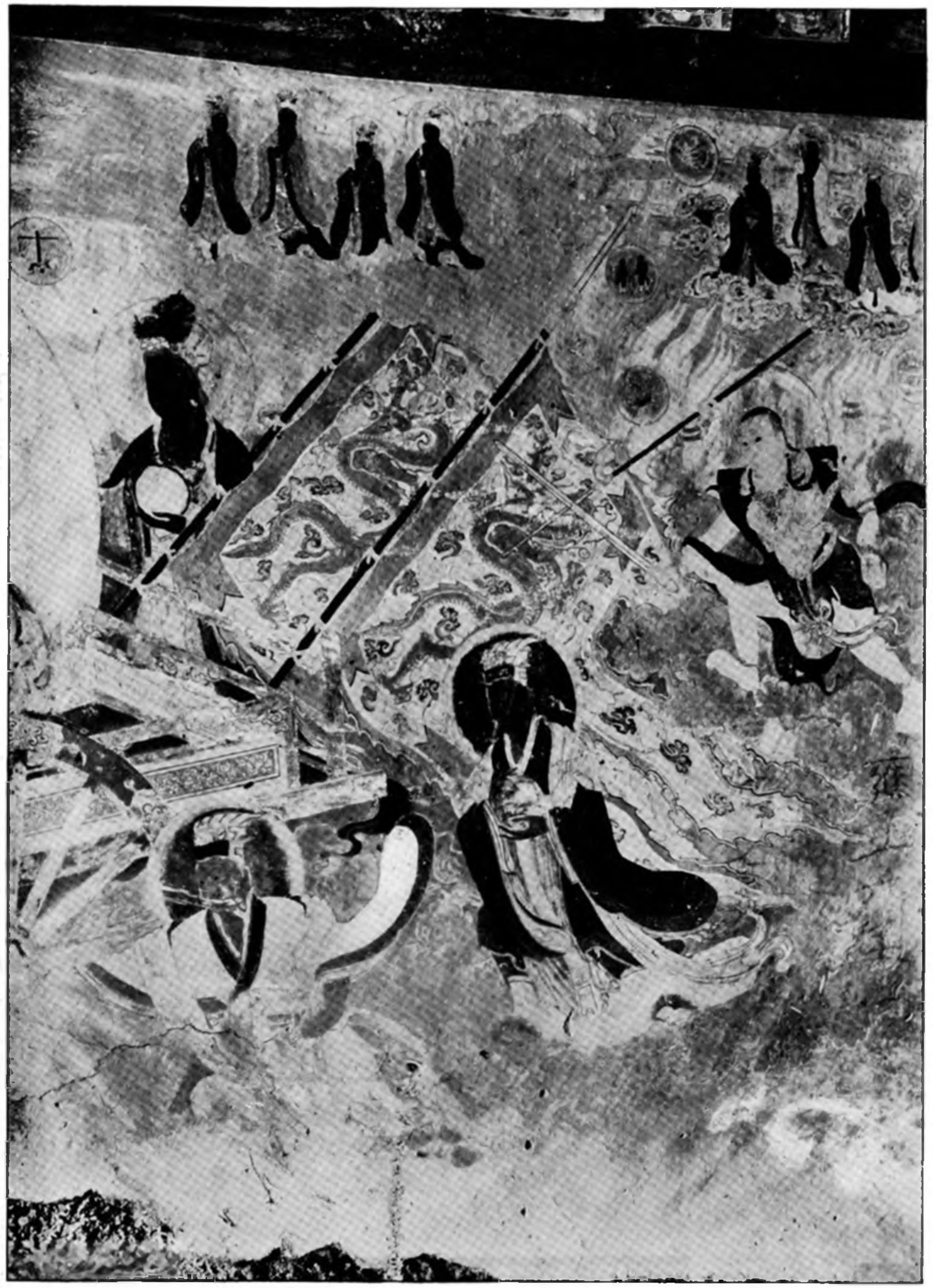
These considerations will explain why I felt obliged to limit my examination to a certain number of cave-shrines which by their arrangement and decoration might serve as typical specimens. In their case, too, special difficulties were often encountered owing to the bad conditions of lighting. Only during certain hours of the morning could adequate light be obtained for particular portions of the painted surfaces of the walls. Even then work was often seriously interfered with by the dust haze due to the violent gales which used to blow up the desert valley from the north or north-east, recurring at that season at frequent intervals. Thus it cost no small amount of time and effort to secure the photographic negatives upon which I had to rely mainly for some record of the chief characteristic schemes of mural decoration to be found in the caves.

I was well aware that these photographs, of which a selection is reproduced in Figs. 200–36, would by themselves be wholly inadequate for a proper study of the varied aspects of Buddhist pictorial art as displayed on the rock-cut walls of the Thousand Buddhas of Tun-huang. For conveying some impression of its colour effects, often exquisite and always harmonious in the older frescoes, and constituting one of their chief charms, I had no means at all. Fortunately I knew that these fine paintings, all excepting one shrine executed in tempera, were reasonably safe from

[1] I may note here that throughout my stay at Ch'ien-fo-tung both the Surveyor and Naik Rām Singh were ailing, the latter from what sad experience subsequently proved to have been premonitory symptoms of the fell disease which caused his blindness a year later, and to which he finally succumbed. See below, chap. XXXIII. sec. i.

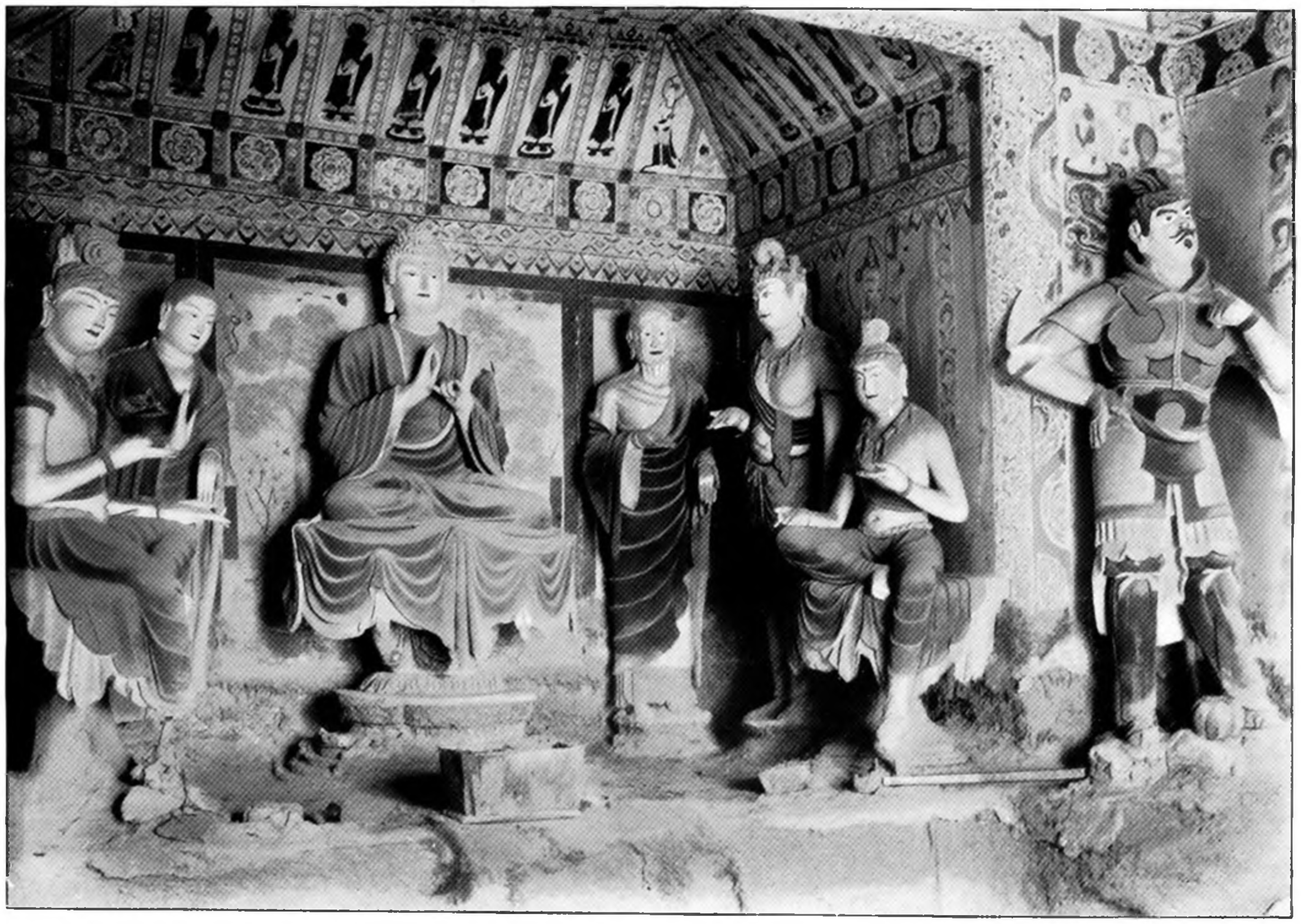


225. WALL PAINTING IN TEMPERA, SHOWING BODHISATTVAS, ON SOUTH WALL OF PORCH IN CAVE IX, CH'IEN-FO-TUNG.



226. PAINTING IN TEMPERA SHOWING PART OF BUDDHA'S CAR WITH ATTENDANT HOST OF PLANETARY DIVINITIES, ON SOUTH WALL OF PORCH IN CAVE VIII, CH'IEN-FO-TUNG.

227. STUCCO IMAGES OF LATE DATE REPRESENTING HSÜAN-TSANG AS ARHAT WITH ATTENDANTS, IN CELLA OF CAVE XIV, CH'IEN-FO-TUNG.



228. RENOVATED STUCCO IMAGES IN ALCOVE OF CELLA IN CAVE X, CH'IEN-FO-TUNG.

destruction, whether of the wanton vandal type or of the equally mischievous sort which modern exploitation, for the benefit of collectors or museums, has tended to develop elsewhere.[2] There was comfort, too, in the hope that their detailed study on the spot by qualified experts was not likely to be long delayed. It is a source of special gratification to me that this hope has been realized early. Within a year of my visit came Professor Pelliot's prolonged stay. It enabled that brilliant Sinologue not only to devote careful study to the manifold epigraphic materials in the form of dedicatory or explanatory inscriptions, cartouches, etc., inserted in the wall-paintings, which help to determine the subjects represented or along with the abundant sgraffiti to settle the date of the temples, but to secure also an adequate collection of photographs through qualified professional help.[2a] Some months after my second visit to the site, in 1914, I had the great satisfaction to learn that Professor Serge d'Oldenbourg, one of the leading authorities on Buddhist art and iconography, had made the Thousand Buddhas of Tun-huang the objective for a special expedition organized under the auspices of the Russian Academy of Sciences and comprising the requisite staff of artistic and technical assistants.

Subsequent detailed study of frescoes.

It is to be hoped that the publication of the materials brought back by MM. Pelliot and d'Oldenbourg will not suffer more delay than is implied by present conditions. This hope and a knowledge of the abundance of those materials furnish an additional reason for strictly limiting my present account to a description of the particular shrines which my photographs and plans may suffice to illustrate. Nor shall I attempt in their case to deal with general features the right explanation of which might presuppose close acquaintance with the rest of the local shrines or with other Chinese Buddhist sites also, such as Yün-kang or Lung-mên. In recording my observations and explanations as far as they go I shall for convenience's sake follow the order from north to south, in which the caves examined by me were numbered.[3]

Description limited to particular shrines.

The cave-temple, Ch. i, which had sheltered the great hoard, and which for that reason may fitly take the first place, is in respect of its ground-plan (Plate 43) certainly the largest of the existing shrines, but by no means the most ornate in its mural decoration. It consists in its old portion of a cella 54 feet deep and 46 feet wide, approached by a porch having a width of about 14 feet. Fig. 200 shows the north side of both, together with the entrance which gives access to the formerly walled-up chapel. The antechapel, once probably rock-carved, was found completely decayed by Wang Tao-shih, who replaced it by a modern structure of timber and brickwork. His work, too, are the hideous stucco sculptures, over life-size, which now occupy the large image platform: a Buddha seated on a separate high base, flanked on each side by a monkish disciple, two Bodhisattvas, and a Lokapāla. Though the statues are quite modern, there is reason to believe that portions of the bases are old and the grouping of the figures that originally intended for these bases. Old, too, are the elaborately decorated halo and vesica in coloured stucco relievo

Cave-temple Ch. i. Restorations.

[2] Apart from any protection that continued worship and local superstition may offer, account must be taken also of the important fact that owing to the very unequal surface which the pebbles, etc., embedded in the conglomerate of the rock walls present, and to the exceptional hardness and cohesion of the plaster placed over it to serve as a substratum for the wall-paintings, all in tempera, removal of detached portions of the latter is practically impossible. 'Fresco-cutting' operations, such as can be carried out with success and relative ease at Turfān and other Turkestān sites, would yield at Ch'ien-fo-tung only small shattered fragments of brittle coloured plaster.

I had a visible demonstration of this difficulty—and of the protection it luckily affords—on my second visit to the site. I found that in the noble wall-painting which adorns the western side of the porch leading into the cave-temple, Ch. viii (Fig. 226), the head of one of the flying attendants by the side of the Buddha's car, intact in 1907, had been chiselled around by a subsequent visitor, undoubtedly for the purpose of removal. An examination of the broad cutting effected showed plainly why the attempt had failed.

[2a] [See now Pelliot, *Les grottes de Touen-houang*, i (1920), reproducing the first series of a large collection of fine photographs taken by the late M. Charles Nouette.]

[3] The position of these particular caves is duly marked in the site plan, Pl. 42.

which, together with a richly painted canopy higher up, cover the screen spared from the rock at the back of the large Buddha image. The passage cut through the rock behind this image is a regular feature in all the larger Ch'ien-fo-tung cellas and necessitated by the 'Pradakṣiṇā'. The mural decoration of the cella is of an unusually simple design. It consists, on the vertical wall surfaces, of a diaper of small seated Buddha figures, in different coloured robes, painted on a background of light greenish-blue which prevails in other cellas also. No doubt, the outlines were here, as elsewhere in such cases, produced by means of stencils. Above them a row of broad-pointed streamers, hanging from a gaily painted floral border, serves as a frieze for the frescoed walls. The sides of the truncated cone which forms the ceiling are painted with a floral pattern of obviously textile origin, showing large repeating rosettes with stylized foliage filling the interspaces.[4]

Mural decoration of Ch. I.

Mural paintings of porch.

Of a more interesting character is the decorative scheme of the side walls of the porch. It shows a procession of over life-size Bodhisattvas carrying offerings and moving towards the cella. Each has an elaborate tasselled canopy hanging above his head, while graceful tracery with lotus flowers fills the spaces intervening between the Bodhisattvas. This scheme was evidently a favourite one for adorning the porches of large cellas, and is seen in better preservation elsewhere.[5] Browns and pale blues or greens are the prevailing colours in the garments. From the way in which this decoration is extended close to the edge of the chapel entrance I was inclined to believe that it might have been executed after the chapel with its sacred deposit had been walled up. This would furnish an approximate date for the wall-painting of the porch. But it must be remembered that the intention obviously was to hide the place of deposit, and that the reproduction of a familiar decorative scheme dating a few centuries earlier over the surface of the newly added walls would not have offered serious difficulties to the local painters, who in Sung times were still capable of good work.

Sculptural remains in shrine Ch. II.

In a group of grottoes adjoining Ch. I to the north and carved into the cliff on a higher level (Fig. 193) there is a large cella, Ch. II, which in spite of being much injured is of interest as having completely escaped restoration. The cella, 38 feet square, retains, as the plan shows (Plate 43), a large platform for statues; but of these only the central image of a seated Buddha partially survives with broken lotus bases for four minor figures on either side. As seen in Fig. 201, the Buddha statue has lost its head completely except for the wooden core, and also most of the arms. But the rest of the well-draped figure is in fair preservation and shows traces of gilding on the purple robe. The halo and vesica executed in low relief display, in double bands excellently designed, tracery in light green over purple. Within the inner band in the vesica are seen small Buddhas seated on open lotuses poised over graceful stems. Both halo and vesica are edged with borders of fine flame scrolls, alternately green and purple. We find equal freedom and grace in the painted designs of the base and the canopy, the latter showing in its extant portion cloud scrolls surmounted by large chrysanthemum-like flowers, such as appear also in some of the large Paradise paintings above discussed.[6] Very skilful, too, in their bold drawing and colouring are the figures of two haloed disciples shown standing by the side of the Buddha, the elderly one in monk's garb on the right evidently representing Kāśyapa.

Wall-paintings of cella Ch. II.

The tempera paintings once covering the cella walls throughout have suffered very badly, the plaster having been effaced or completely broken in most places. But on the south wall three out of the four large panels into which the frescoed surface was once divided still remain for the most part. Rising above a painted dado, six feet high, with figures of worshipping monks and nuns, the

[4] For a pattern closely resembling, see the textile Ch. 0076, Pl. CXI; also p. 906 above, and the decoration of the ceiling in Ch. IX, Fig. 225.

[5] See Ch. VII, Fig. 214; Ch. IX, Fig. 225.

[6] See above, pp. 884 sqq.; and especially Ch. liii. 001, *Thousand* ., Pl. X.

remaining panels show Sukhāvatī scenes closely resembling in all details those in the main group of our Western Paradise paintings.[7] Thus in one of the panels (Fig. 206) we see the lower portion of an elaborately arranged divine assembly, grouped around two platforms which are occupied by celestial dancers and musicians, while newly re-born souls in the form of babes disport themselves by their side. In the panel reproduced in Fig. 202 we find the foreground filled with a mass of small detached scenes, all painted in secular Chinese style and, no doubt, like the corresponding class of scenes in the side panels of our large Paradise pictures, representing incidents of some Jātaka story. The inscribed cartouches are obviously intended to interpret the story. The close agreement in style and arrangement between those pictures and the fresco panels makes it probable that the wall paintings as well as the sculptural remains in this cave go back to T'ang times.

True fresco in shrine Ch. II. a.

The small shrine Ch. II. a, immediately adjoining Ch. II on the north and containing a cella less than 9 feet square, is remarkable for its wall-paintings, which are executed in true fresco and in a style strikingly different from that which I have observed elsewhere on the walls of Ch'ien-fo-tung cave-temples. The photographs reproduced in Figs. 203–5 will illustrate this difference better than any description, even though they cannot convey the delicacy of the outlines and still less the harmonious blending of soft tints. The chief frescoes occupy the south and north walls of the little cella, the entrance being from the east, and the west side occupied by an alcove containing a modern unfinished relievo group. The fresco panel on the south (Fig. 204) shows the figure of a Thousand-armed Avalokiteśvara, treated in the typical form of a Chinese 'Goddess of Mercy' and surmounted by a Dhyāni-buddha. At its feet are seen kneeling two haloed worshippers, both dressed in flowing gilt-edged robes. Above them stand two more haloed figures, perhaps meant to represent Bodhisattvas, in rich costumes and with very elaborate coiffures. The corners above them are filled on either side by an exquisitely drawn Apsaras or Gandharvī (Fig. 203), shown floating on cloud scrolls with her dark red and green scarves fluttering in graceful curves behind to indicate rapid movement. Nowhere else in the Ch'ien-fo-tung wall-paintings do we meet with such verve and freedom as these Apsaras figures and the corresponding ones on the south wall display.

Other frescoes in cella Ch. II. a.

The fresco on the north wall (Fig. 205) is a close *pendant*. A similar Thousand-armed Kuan-yin figure, but here also carrying a flask, occupies the centre. Two haloed worshippers, the one on the right bearded, stand on either side in the middle, while two grotesque figures, resembling Vajrapāṇis with their muscular exaggeration and violent movement, appear in the bottom corners. The panels on either side of the entrance and alcove are filled with richly draped haloed figures in varying attitudes, of which Fig. 203 shows the one in the south-west corner. Within the alcove are painted two more Bodhisattvas, while the background behind the main image no longer remaining is decorated with graceful bamboo foliage painted in white on dark red. The coffred ceiling shows on similar dark-red ground a carefully executed diaper with white and black flowers and scrolls. It is possible to trace points of contact between the style observed in these fine frescoes and certain of our best silk paintings from the hoard. But I cannot attempt to follow up this relation or to seek for the phase of Chinese religious painting with which the style of these frescoes may seem specially connected. So much, however, is clear that the artist who adorned this small grotto must have stood, in skill and inherited training, far above the local school of painter-decorators to whom we owe most of the mural paintings I am able to deal with here.

Stucco sculptures, frescoes of Ch. III III. a.

Proceeding south of Ch. I and passing the deep grotto Ch. III, which contains a colossal stucco image of Buddha entering Nirvāna behind a central rock mass (Plate 43), we come to the small shrine Ch. III. a, measuring 19 feet square without the alcove on the west which faces the entrance. The stucco images placed here (Fig. 207), comprising a seated Buddha with the right hand raised in the

[7] Cf. above, pp. 883 sqq.

abhaya-mudrā and on either side of him a monkish disciple, a Bodhisattva and a Lokapāla, are old in their lower portions, while the heads and most of the figures from the waist upwards are modern restorations. Old, too, are the gilt-edged halo and nimbus in low relief behind the Buddha, with dark-green foliage over brown ground. The wall-paintings in the alcove, darkened by incense smoke, include on the ceiling a scene which shows the Buddha teaching in a grove surrounded by celestial attendants. Pale greens and blues prevail in the colour-schemes of this and the small shrines next mentioned. A diaper of roughly stencilled small Buddha figures covers the ceiling of Ch. III. a, as well as most space on the side walls. The centre, however, of these is occupied by a painted panel nearly 7 feet wide, representing the Western Paradise. The panel on the north wall (Fig. 209) is a composition closely resembling in arrangement and style the Sukhāvatī picture on silk, Ch. xlvii. 001,[8] but with the addition of a celestial dance at its foot.

Decoration of shrines Ch. IV–VI.

Ch. IV, another small shrine, with a cella 15 feet 10 inches long and 13 feet 3 inches wide and a group of partially old stucco images in an alcove (Fig. 208), is decorated in much the same style as Ch. III. a. The side walls contain each a large painted panel showing Sukhāvatī scenes. That on the north wall, with a width of 8 feet (Fig. 210), is a typical representation of Amitābha's Paradise, as seen in a large group of our silk paintings.[9] Comparison with these makes it easy to recognize in the scenes filling the side panels the story of King Ajātaśatru and the Meditations of Queen Vaidehī taken from the *Amitāyurdhyāna-sūtra*.[10] The photographs in Figs. 211, 212 show the alcoves, or image recesses, of two more grottoes, Ch. V, VI, which agree in general arrangement with those last described.[11] In Ch. IV little survives of the original statuary beyond the raised lotus seat of the central Buddha and the bases of four attendants on each side; but the fine cloud scrolls filling the spaces between the flame-bordered haloes and the gracefully designed festoons of lotuses on either side of the alcove opening may be mentioned. The diaper covering the whole of the cella walls is identical with that in Ch. I, showing stencilled rows of seated Buddhas, dark brown with white drapery over a light green ground. Both here and in Ch. VI we meet in the ornamented borders, etc., with floral patterns which have a close resemblance to the designs preserved for us in figured or printed silks from the walled-up chapel. In Ch. VI each of the side walls is decorated mainly with a large panel representing a Western Paradise in simplified form, with legendary scenes on the margins (Fig. 231).

Cella and porch of cave-temple Ch. VII.

The cave-temple Ch. VII, as the plan (Plate 44) shows, has a relatively large cella, about 38 feet square, approached through a porch which owing to its length, some 27 feet, badly interferes with its lighting. The horseshoe-shaped altar platform is now occupied by three colossal Buddha statues seated in European fashion and flanked each by a pair of attendant figures. The images are all of clumsy modelling and seemed even in their lower portions to date from some later restoration. The painted decoration of the rock-carved screen behind looked like an inferior imitation of that occupying the same place in Ch. II. The wall-paintings of the cella resemble in subjects and style those of Ch. VIII to be described presently, but appeared to me distinctly less careful in execution and later. On the north and south walls they comprise four large panels with Sukhāvatī representations, which texts conspicuously inscribed in the centre are intended to explain. Rows of Bodhisattvas marching in procession and similar to those decorating the porch are depicted on most of the dado, while elsewhere narrow panels, badly faded, show what evidently are Jātaka stories. The west wall is occupied by a large painted composition (Fig. 213) identical in its legendary subject with that which covers the corresponding space in the cave Ch. XVI. The walls

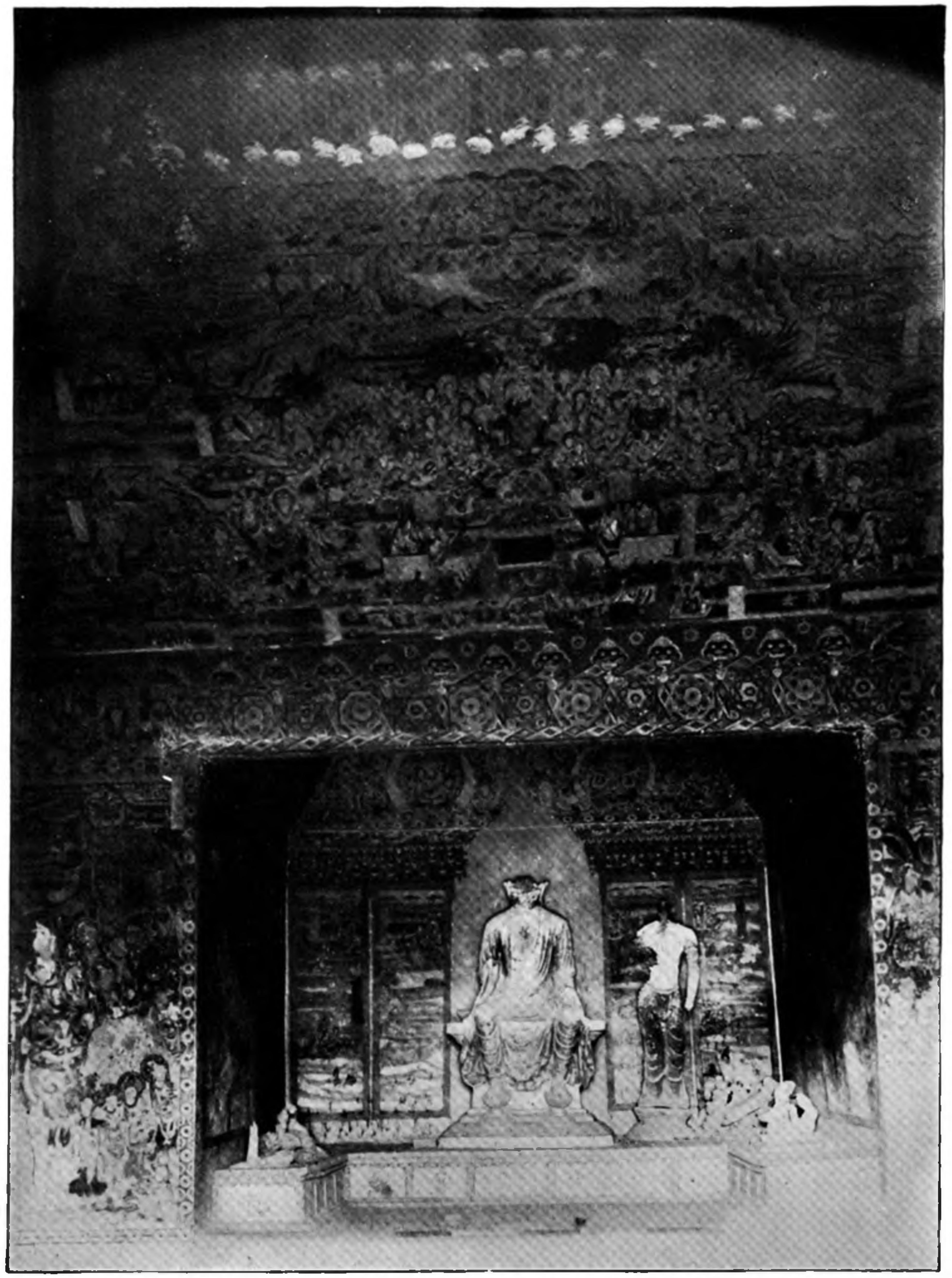
[8] Cf. above, p. 885; also *Thousand Buddhas*, Pl. XI.

[9] Cf. above, pp. 885 sqq., and for illustrations, Ch. 00216, Ch. lviii. 0011 in Pl. VIII, XXX of *Thousand Buddhas*.

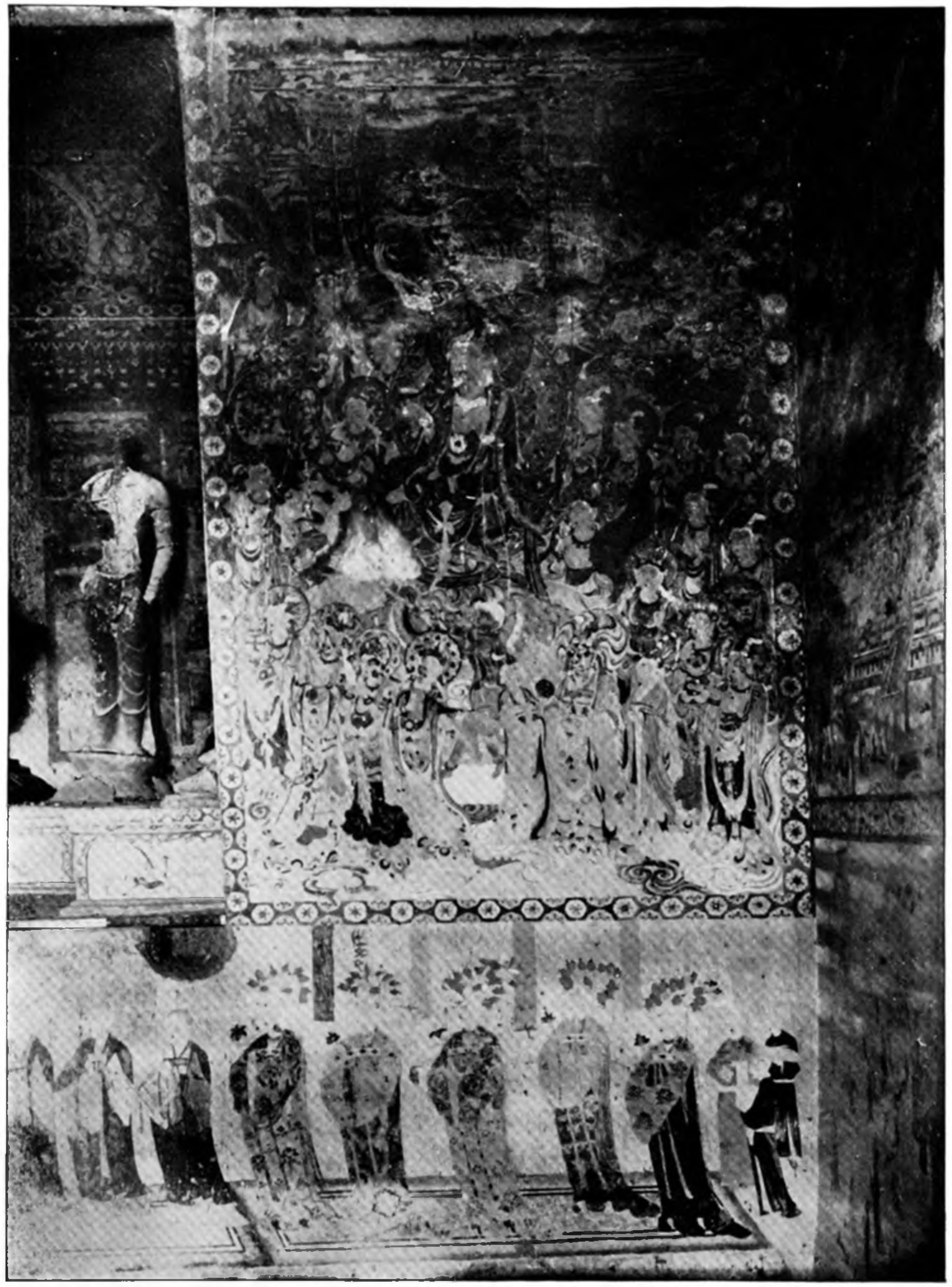
[10] Cf. below, Descriptive List, Ch. 0051.

[11] For ground plans, see Pl. 44.

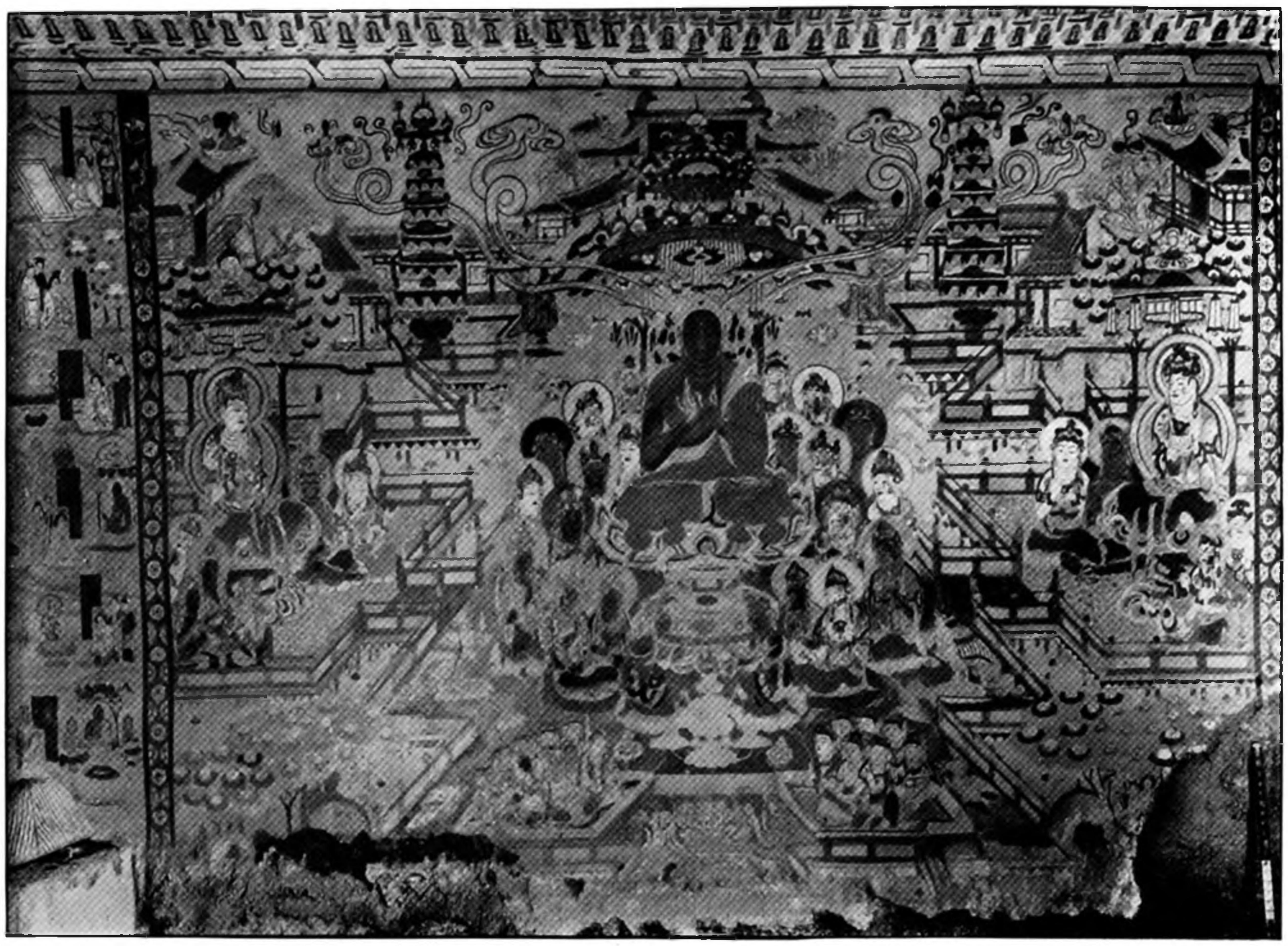
P. 930



229. STUCCO IMAGE OF SEATED BUDDHA IN ALCOVE, AND TEMPERA PAINTINGS ON WEST WALL AND CEILING, OF CAVE CH. XII, CH'IEN-FO-TUNG.



230. TEMPERA PAINTINGS IN NORTH-WEST CORNER OF CELLA IN CAVE CH. XII, CH'IEN-FO-TUNG.



231. CENTRAL PANEL OF TEMPERA PAINTING REPRESENTING WESTERN PARADISE, ON NORTH WALL OF CAVE CH. VI, CH'IEN-FO-TUNG.

232. PAINTINGS IN TEMPERA, REPRESENTING SCENES OF WESTERN PARADISE ABOVE, AND MOVEMENTS OF TROOPS BELOW, ON SOUTH WALL OF CELLA IN CAVE CH. XII, CH'IEN-FO-TUNG.

of the porch are decorated on either side with an imposing procession of over life-size Bodhisattvas, drawn in vigorous outline and carrying offerings. The brown under-garments with the pale blue Saṅghāṭi and light green stoles make up a fine colour-scheme, and there is impressive dignity in the long array of divine figures. Their rich ornaments are shown in low relief and set off with gilding on the edges. An elaborate floral diaper in brighter colours adorns the ceiling of the porch, while that of the cella is covered with a profusion of scenes difficult to make out in detail but apparently representing legends.

Sculptural remains in cella Ch. VIII.

Ch. VIII is a cave-temple but little smaller in size than Ch. I and situated near the middle of the main group of grottoes. In wealth and variety of its mural paintings it stands foremost among the shrines examined, and merits closer description all the more as it is possible to illustrate its decoration by an adequate number of photographs.[12] As seen in Fig. 218, the statues once occupying the large horseshoe-shaped platform of the cella have disappeared completely except for scant traces of their bases, while the wall-paintings of the cella have survived for the most part in perfect preservation except here and there at the foot of the dado. In front of what was the base of the principal image in the centre there rises now a small Stūpa, roughly built of clay but curious as showing correctly the three-fold square base and spherical dome typical of old Central-Asian Stūpas. The west side of the image platform is backed in the centre by a massive screen spared from the rock and expanding at the top, on a level with the cornice of the cella walls, into the shape of a high double cantilever. The face of the screen proper is painted with rows of colossal Bodhisattvas grouped in worshipping attitude on either side of what must have been the central image, while above there is shown an elaborate canopy surrounded by big chrysanthemum-like flowers. That the image in front of this screen must have been a Garuḍa or a divine figure borne by a bird is suggested by the remains of a colossal tail in low relievo seen rising between the two Bodhisattva groups, as well as by the stucco fragment of a colossal bird's foot with claws which I found placed on the top of the little Stūpa dome. Along the sides of the platform could be traced remains of bases for attendant images, four each on the north and south. The platform still retains its old decoration in painted plaster relievo and rises in two receding stories to 1 foot 8 inches and 3 feet respectively. In front of it a roughly built modern altar serves for offerings of incense, etc.

Decoration of ceiling in Ch. VIII.

The ceiling of the cella rises in the shape of a truncated cone towards the coffer-like centre of the roofing, formed by two receding courses with three more added below in the shape of cornices painted in perspective. The decoration of two of these painted courses, consisting of closely set medallions with Buddha figures and of an elaborate valance, is visible in Fig. 218. The true receding courses or mouldings are decorated with floral scrolls, and the coffer in the centre, about 5 feet square, with a large rosette surrounded by a flower diaper. The sloping sides of the ceiling are covered with stencilled rows of seated Buddha figures, each of the four sides except the one partially covered by the screen containing in the centre an oblong central picture in which a Buddha is seated between two Bodhisattvas. The four corners at the foot of the ceiling are hollowed out into elliptical squinches, each of which is occupied by the well-painted colossal figure of a Lokapāla in full panoply with his attendants (Fig. 219).

Mural paintings of cella Ch. VIII.

The paintings of the cella walls, to which we may turn next, comprise, besides a dado to be described presently, two large compositions (ii, xv) on either side of the entrance; five panels, each 9 feet 2 inches wide on both the south and north walls (iii–vii, x–xiv); and one continuous fresco covering the whole west wall, 43 feet long, and passing behind the screen also (viii, ix). The panel ii, of which only the lowest portion is seen in Fig. 216, shows in the centre a haloed figure

[12] In the ground plan, Pl. 44, the position of the main panels into which the wall-paintings are divided is marked by small Roman numerals, i, ii, etc., starting from the south side of the porch.

seated on a carpeted platform and backed by a crowd of worshipping saints. Below a procession formed by a prince and his train seems as if engaged in performing Pradakṣiṇā around. A double row of swordsmen and a string of attendants carrying offerings are seen preceding the prince and his *cortège.* The *pendant* to this panel is formed by the picture xv, on the opposite side of the entrance (Fig. 217). Here we see the centre occupied by a royal personage, without halo, seated on an elaborate canopied platform which seems to move between, and on, finely painted clouds. Behind follows a crowd of haloed saints and divinities, while below a train of attendants is seen marching in vigorous movement. Along the vertical sides, and where space permits also above, a number of small scenes, apparently of the Jātaka kind, are depicted.

Large painted wall panels in cella Ch. VIII.

I shall not attempt to describe in detail the compositions which fill the ten large panels of the side walls. Most of them represent divine assemblages with a Buddha figure in the centre, either of the clearly recognizable Sukhāvatī type with lotus tanks, scenes of celestial enjoyment, etc., or else set among smaller scenes of worship and secular life such as those found in the representations of Jātaka stories. Figs. 219, 220, 224, showing the panels v, x, and xi, may serve to illustrate the type of these compositions. Their close connexion both in subject and style with the large paintings of Amitābha's Paradise, etc., in our collection scarcely needs to be emphasized. In panel xiii (Fig. 223) we find no less than eleven small representations of divine assemblies grouped together, each of which is provided with an inscribed panel or cartouche evidently intended to facilitate its identification. It is clear that these and similar paintings, with the contemporary explanatory records thus provided, will prove a valuable source of information for details of Chinese Buddhist iconography in what was, perhaps, its phase of greatest luxuriance. The same may be observed also of the very numerous scenes, crowding the whole surface of the west wall, as seen in the portions viii and ix (Figs. 221, 222). They are continued even under the arched passage behind the screen, where the dim light must have hampered the artist at work quite as much as it now hampers the beholder. They represent varied incidents of secular and monastic life, of travel, pious labours, etc., and are evidently meant to illustrate sacred legends which the cartouches, here luckily almost always filled in, will help to identify.

Paintings of dado in Ch. VIII.

Below these big panels, probably over 11 feet high, and separated from them by a band with fine floral ornament, there extends everywhere a painted dado which, too, claims distinct interest. This is $5\frac{1}{2}$ feet high on all sides, except under the panels of the east wall, ii and xv, where it reaches to a height of 8 feet. On the west wall the dado is made up of small panels, arranged in vertical rows and often effaced by rubbing on account of the narrowness of the passage way; they seem all to represent legendary scenes probably taken from Jātakas. Everywhere else we find the dado occupied by rows of female figures elaborately dressed and coiffured in the fashion which, after what the donor figures of our silk paintings have taught us, we can now with certainty recognize as that locally prevailing in the tenth century.[13]

Procession of princely ladies on dado, Ch. VIII.

All these ladies carry offerings of fruit and flowers. But among them attention is attracted at once by the individualized figures that appear below the panels ii and xv of the east wall and obviously include the donatrices of the temple. It is, no doubt, for this reason that greater height, allowing space for figures over life-size, was allotted here to the dado. Under panel xv (Fig. 217) we see, in front of four attendants, a lady richly bejewelled and wearing the most gorgeous head-dress of all. I shall not attempt to describe this 'creation' in detail beyond calling attention to the huge bulb-shaped cap, adorned with precious stones, etc., and the double-rimmed hat below it, similarly bedecked and supporting long pendants of jewellery. To the right of her are ranged in ascending order of stature three ladies, wearing similar bulb-shaped caps, but of small size and but

[13] Cf. above, pp. 850, 885.

little adorned, who evidently are daughters or relatives of the princely lady. To the inscription painted to the right of her and above the smallest of the girls I shall recur presently. Three poorly preserved figures of men dressed in reddish-brown robes and with the shaven heads of monks precede the family group. A *pendant* to this is presented by the dado on the opposite side of the cella entrance under panel ii (Fig. 216). There we see five richly but uniformly dressed attendants evidently of rank, preceded by three ladies, all of tall stature, whom their peculiar head-dress distinguishes at a glance. The first from the right wears a bejewelled cap with rich pendants of the same shape as that of the princely lady under ii, but a little less ornate in its lower portion. The two to the left of her carry smaller bulb-shaped caps devoid of all ornament.

Inscription naming princess of Khotan.

That the figures just described represent donatrices of high rank was easily recognized from the first. But my satisfaction was great when Chiang Ssŭ-yeh's reading of the above-mentioned inscription showed me that it was a princess from Yü-t'ien or Khotan who had dedicated this temple and left on its dado a record of her pious foundation.[14] But even without this epigraphic detail I could not help being reminded by this procession, with its dignified graceful figures, of noble wall-paintings still further away to the west and of a far greater royal donatrix: I mean the famous mosaics of Ravenna. In San Vitale they place before our eyes the Empress Theodora with her ladies in all her regal pomp; again in San Apollinare Nuovo they show us great processions of saints carrying offerings which look strangely as if they might have served as models for the noble array of Bodhisattvas decorating the approach to more than one Ch'ien-fo-tung shrine. Devoid of any direct iconographic links as this resemblance is, it may yet prove not altogether fortuitous; for modern researches are making it increasingly clear how much of the inspiration which has influenced Byzantine art on the one side and Buddhist art on the other, as carried to Central Asia and the Far East, was derived more or less directly from the Orientalized Hellenistic art of the Near East.

Mural paintings in porch of Ch. VIII.

It still remains to describe the wall-paintings that decorate the porch of Ch. VIII. They are of a type with which I did not meet elsewhere in a corresponding position. The one on the north wall (xvi) had suffered much damage, but there still remained recognizable in the centre a colossal saint (?) walking under an umbrella, preceded by some haloed figures and followed by rows of grey-robed monks with hands folded in worship or carrying offerings. Fortunately the fresco on the opposite wall, i (Figs. 215, 226), had fared better. It is a very spirited work, curiously recalling paintings of old Venetian masters by its rich colouring, free movement, and effect of *plein air*.[15] It displays in the centre a Buddha with the right hand raised in the act of 'revolving the Wheel of Sovereignty', driving on a car which flying divinities at the wheels move through the air. Two gorgeous banners, showing dragons on white ground *semé* with green and blue flowers, float from the back of the car, with their fluttering ends marking rapid movement. A host of celestial attendants, including two carrying globes in their hands and one demon-like, rampant, escort the car in front and behind. Floating above on skilfully painted clouds are seen more groups of genii or saints fully robed and in poses which form a pleasing contrast to the rapid progress of the god's immediate *cortège*. The Buddha's figure has dark brown skin with an upper robe of pale pink gilt

[14] See Appendix *A*, IV, for M. Chavannes' translation of this inscription and for notes explaining the historical interest of the title and family name by which the king of Khotan, father of the princess, is mentioned.

M. Pelliot, *B.É.F.E.O.*, viii. p. 504, alludes to this inscription and points out that the Ts'ao Yen-lu to whom the Khotan princess was married is named in the dynastic Annals as a chief of Tun-huang in the tenth century A.D. Cf. regarding Ts'ao Yen-lu (A.D. 980–1001) M. Chavannes extract from the Sung Annals, Appendix *A*, V. c.

[15] Among the colours fine shades of blue and green are specially abundant, and it is partly due to their prevalence that the photographs reproduced in Figs. 215, 226 completely fail in rendering the gradation of colours or even in showing all outlines with adequate clearness.

on the edges, and an under-robe of pure azure. The car, too, is richly coloured in blue and green, with golden ornaments.

Fresco of Buddha with planetary divinities.

The globes already referred to and others seen floating in the air filled with the symbols of different planets leave no doubt that the fresco is intended to represent the progress through space of a Buddha escorted by planetary divinities. It is, therefore, of interest to compare it with the silk painting Ch. liv. 007 (Plate LXXI), where the same subject is treated, but in a simpler setting and by a hand far less skilled in composition and drawing. Whether Buddha Tejaḥprabha is intended also in the fresco and what his progress as here represented signifies, I must leave to experts to determine. Above the whole composition runs a cornice showing within relievo panels in brown stucco small figures of seated Buddhas. The sloping foot of the ceiling is painted with a richly decorated valance, and above this a floral diaper in gay colours covers the flat vaulting.

Interiors of shrines Ch. IX–XI.

Among the numerous grottoes lining the cliff between Ch. VIII and the shrine of the colossal seated Buddha most either show poor decoration or else have their interiors badly darkened by later antechapels, etc. In the large restored shrine Ch. IX (Plate 45), which has its entrance at some height above the present ground level, I was thus able to photograph only the procession of Bodhisattva figures, in flowing garments of dark brown and green, that decorate the south wall of the porch (Fig. 225). Of the interior of some small restored shrines below, Fig. 228, showing the raised altar recess of Ch. X (Plate 45) with its badly renovated stucco images, may serve as a specimen.

Cave-temples of colossal Buddhas.

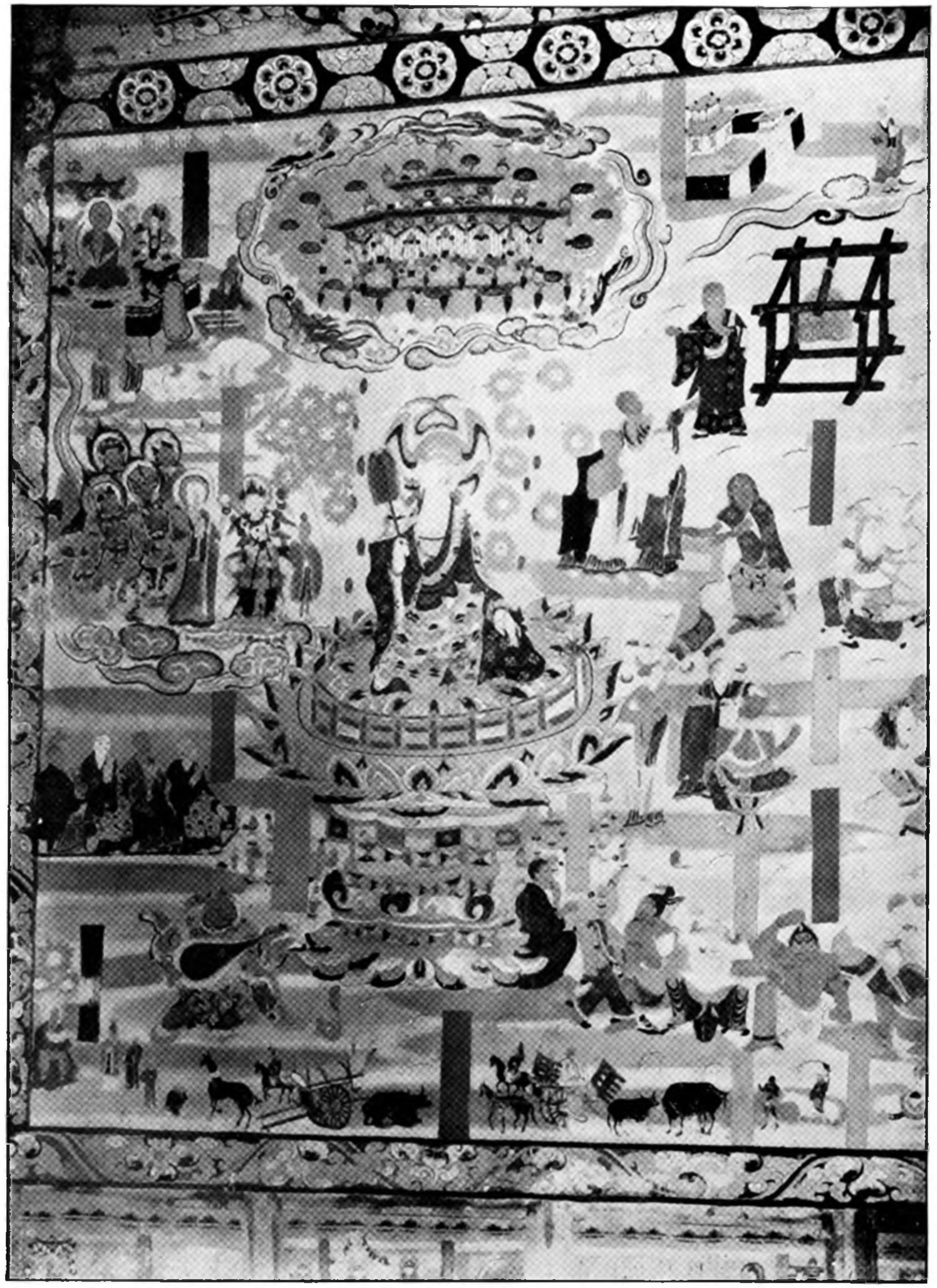
Both the cave containing the colossal seated Buddha and that next but one to the north of it, Ch. XI, where the inscribed slabs of the fourteenth century are placed,[16] are abundantly decorated with wall-paintings of old date. But the dim light which penetrates through the recent structures built in front of them made photographing or even examination difficult. After a long stretch of small grottoes, ranged in several tiers (see Fig. 199) but containing, as far as I could see, no notable decorative work, comes the cave Ch. XIII, occupied by the colossal standing Buddha. Here the frescoes to be seen in the several stories through which the image rises to a height of about 90 feet look old, but proved beyond the reach of the camera.

Mural paintings in shrine Ch. XII.

A small shrine, however, Ch. XII, which closely adjoins this great excavation at a height of about 70 feet and is reached by troublesome rock-cut passages, retains wall-paintings of merit, unfortunately smoke-begrimed and effaced in places, as the grotto appears to have been long used as a living place. Fig. 229 shows the alcove containing, besides débris of attendant figures, a seated Buddha image which seemed old. The frescoes on either side (Fig. 230), drawn in a more spirited and careful fashion than the usual Sukhāvatīs, represent Buddhas surrounded by throngs of Bodhisattvas and other divinities. The side walls north and south are occupied each by three panels containing Paradise scenes with celestial ballets, etc., in elaborate architectural setting. But more interesting than these is the dado running along the foot of the panels (Fig. 232). Its subjects, which I have not found elsewhere in these frescoes, look as if copied from contemporary life. On the south wall there are depicted cavalcades of mounted soldiers and dignitaries with flying banners, squads of mail-clad horsemen with musicians playing on long horns and kettle-drums, etc. The varied movements of the horses are rendered with conspicuous skill. The dado of the north wall has suffered much damage, but still shows in places carts and palanquins escorted by servants, with remnants of hunting scenes near the entrance. Carefully executed figures of donors and monks appear on the dado below the alcove, and suggest by their dress a later date for these paintings (ninth–tenth century) than might have been inferred from their superior workmanship.

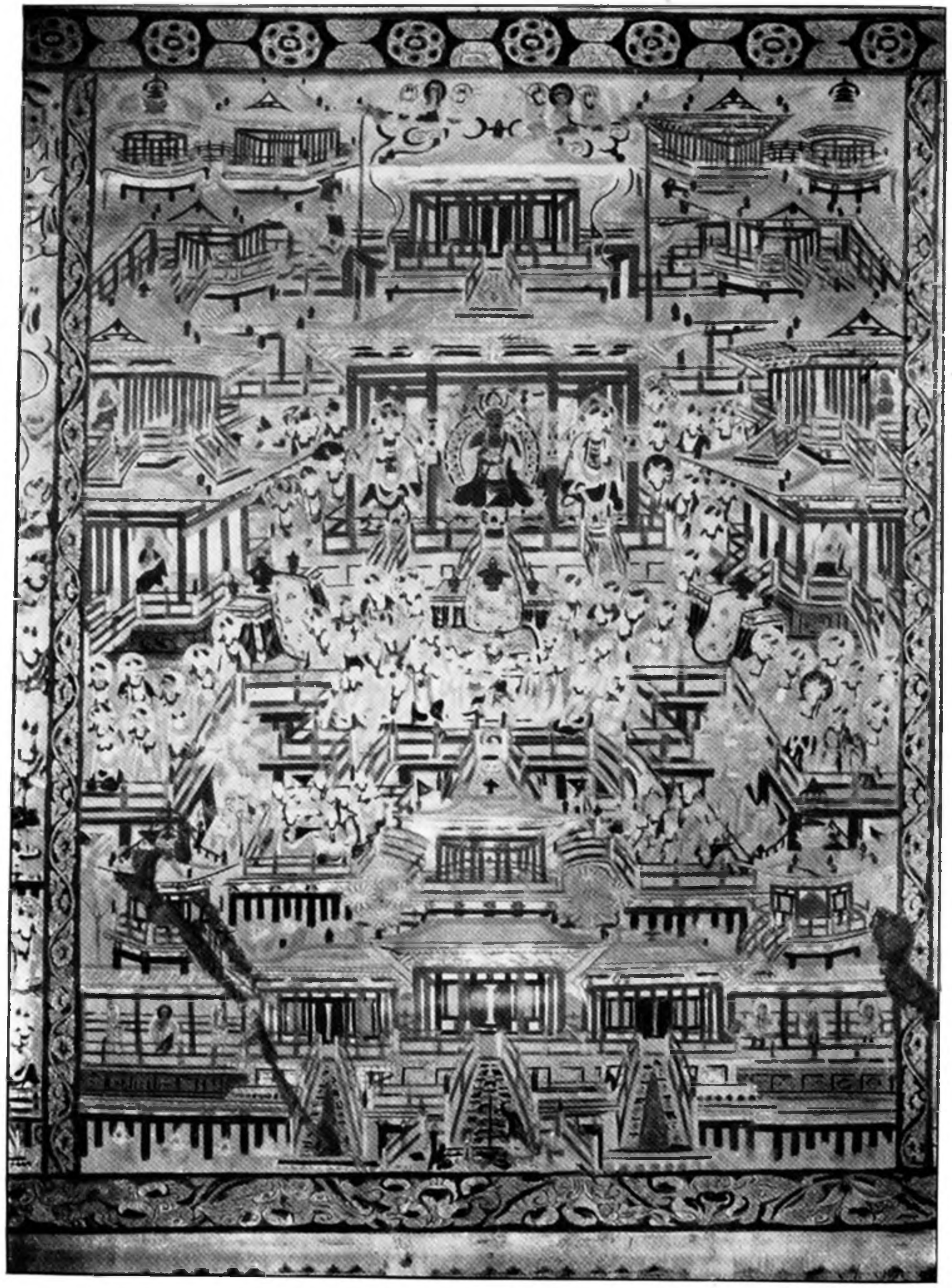
To the south of the colossal standing Buddha there follows a group of much-restored large

[16] See above, pp. 799 sq.

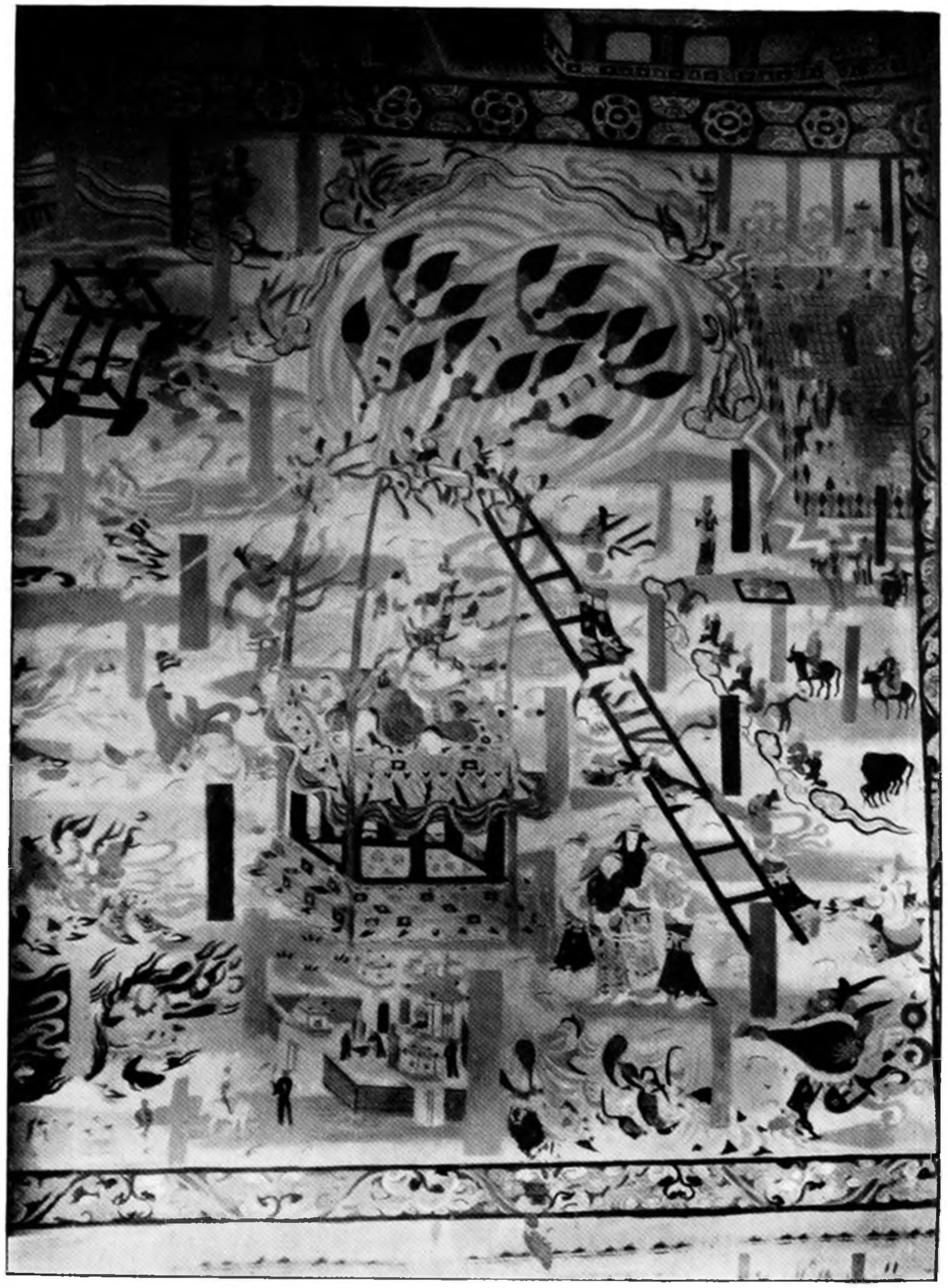


233. LEFT-HAND PORTION OF PAINTING IN TEMPERA, WITH LEGENDARY SCENES, ON WEST WALL OF CELLA IN CAVE CH. XVI, CH'IEN-FO-TUNG.

234. PAINTINGS IN TEMPERA ON WALLS OF NORTH-WEST CORNER OF CELLA IN CAVE CH. XVI, CH'IEN-FO-TUNG.



235. PAINTED PANEL IN TEMPERA, SHOWING WESTERN PARADISE, ON NORTH WALL OF CELLA IN CAVE CH. XVI, CH'IEN-FO-TUNG.



236. RIGHT-HAND PORTION OF PAINTING IN TEMPERA, WITH LEGENDARY SCENES, ON WEST WALL OF CELLA IN CAVE CH. XVI, CH'IEN-FO-TUNG.

shrines, which have lost most of their original wall-paintings or else are rendered very dark by structural additions in front. Apart from the large modernized temple Ch. xv containing the slab inscribed in A.D. 776 and 894,[17] I may mention here the smaller grotto Ch. XIV which is now dedicated to 'T'ang-sêng', i.e. Hsüan-tsang, in his capacity as a canonized Arhat of the Chinese Buddhist Pantheon. Fig. 227 shows the altar recess holding his stucco image seated in the fashion of a Buddha in the pose of meditation, together with four attendants. In front of the great pilgrim saint is modelled a quaint monster, half dog, half seal, looking affectionately towards him. Though the statues have a modern appearance, the installation of the pious traveller as the resident divinity of this shrine cannot be quite recent; for the spirited paintings on the walls of the porch and antechapel representing his mythical companions with the head of a bull and a horse respectively, and also scenes from the legendary story of his travels, have faded a good deal.[18]

Shrine of Hsüan-tsang as Arhat, Ch. XIV.

Just above the southernmost of the restored cave-temples is a large well-lit shrine, Ch. XVI, the mural decoration of which offers points of special interest and may fitly serve as the subject of my concluding notes. In general arrangement, subjects, and style, the wall-paintings of its cella correspond very closely to those in Ch. VIII, and certain indications of detail, including a less careful execution of the brushwork, made it appear to me probable that the Khotan princess's cave-temple had served here in the main as the model. The north and south walls show practically the identical scheme of large panels with divine assemblages and scenes in Buddhist Heavens (Fig. 235), while the subjects represented in the panels on both sides of the entrance are also in close agreement.[19] But in the dado below there is a significant difference, rows of typical Bodhisattvas painted mainly in browns and greens replacing the procession of princesses and their ladies. What, however, gives to the decoration of Ch. XVI its particular interest is the curious and impressive composition which covers the whole of the west wall. Instead of being covered as in Ch. VIII with a multitude of small scenes without any obvious design or cohesion in their grouping, the big wall-surface serves here for the pictorial representation of a legendary subject which, in spite of an abundance of incidental scenes, is held together by two predominant motifs. This division itself is necessitated by the screen at the back of the central platform which hides the middle portion of the fresco from view except when examined in the narrow passage behind serving for the Pradakṣiṇā.

Wall-paintings of large cella, Ch. XVI.

The most striking feature of the whole composition is seen in its right-hand portion, where the effect of a powerful wind is depicted in a remarkably vivid and realistic fashion (Figs. 234, 236). In the centre is shown a canopied tent-like structure in danger of being blown away to the right. While its occupant, a richly dressed figure without a halo, bends forward as if to balance the force of the wind and to prevent the threatened overthrow of the structure, its curtains along with the massive tassels of the canopy are tossed up into the air in violent movement. Some bearded attendants, with hair and clothes twisted by the gale, are seen engaged in the endeavour, from a ladder and pole, to secure the whirling curtains and canopy. The violence of the wind-effect is reflected also in other figures and objects seen on the left, while some spectators on the right seem to watch in amazement or to move quickly forward to help. Near the edge on the right and below, incidents are depicted apparently distinct from the main story.

Representation of 'wind scene' on west wall, Ch. XVI.

The left-hand portion of the wall-paintings forms a well-designed *pendant* to the one on the right (Fig. 233). We see there the wind-raised tumult of the latter balanced, as it were, by the

[17] Cf. above, p. 799.

[18] Regarding the modern popular legends which have transformed Hsüan-tsang into a kind of saintly Münchausen, cf. *Desert Cathay*, ii. pp. 169 sq. [Regarding the fanciful novel known as *Hsi yu chi* 西遊紀 to which Hsüan-tsang owes his modern celebrity, see now Couling, *Encyclopaedia Sinica*, pp. 241 sq.]

[19] For the similarity of decorative details in borders, ceiling, etc., comparison of Figs. 219 and 234 is instructive.

Pendant to 'wind scene', Ch. xvi.

calm dignified presence in the centre of a Buddha or Bodhisattva, dressed in the patchwork robe of a monk, like the usual garment of Kṣitigarbha, and gently fanning himself with his right hand. Above his head graceful cloud scrolls support an elaborate canopy. At the feet of the divine figure and in front are shown, in small detached groups, persons undergoing painful operations; one with his head pressed down, another with his arms tied at the back, etc., while a lamenting female turns her hands towards the Buddha as if to implore redress. Above a priestly figure seems about to strike a bell hanging from a massive timber framework; it is seen again on the right in the distance, but there carried through the air by the gale. The arm of another figure close by is raised, as if pointing to the effect produced far away. This effect seems likewise to be marked by the wind-tossed figures and objects which are shown in the middle portion of the fresco where it passes behind the central screen. The scenes represented along the side margin and below the main subject show no direct connexion with it, but may safely be assumed to have their place in the legend which the whole fresco was intended to illustrate.

Legend represented on west wall of Ch. xvi.

What this legend was I have not been able to ascertain so far.[20] That it will ultimately be traced in the vast lore of sacred stories preserved in Chinese Buddhist texts is very probable *a priori*, and the cartouches, where filled in, may give help. But anyhow it is certain that the legend must have been well known and popular in this region; for I found its representation repeated, not only in the shrine Ch. vii (Fig. 213), but also in one of the cave-temples of Wang-fo-hsia.[21] The fact that the general design and most of the details are substantially identical in all three wall-paintings raises a strong presumption that we have here replicas of some earlier and favourite picture. That its original designer may be credited with a considerable degree of artistic imagination and skill is clear. But without knowing the story we are not in a position to judge whether the striking contrast between the gentle act of the Blessed One's fanning and the violent storm shaking the royal tent in the distance was first brought out by the art of the painter, nor whether the wind-swept condition of the Tun-huang marches had something to do with the local popularity of the story which he set himself to illustrate.

Oldest extant grotto.

I cannot conclude these very imperfect notes on individual shrines without expressing my regret that what apparently is the oldest extant grotto retaining its original decoration had completely escaped my attention. I mean the grotto of which M. Pelliot, in the first summary account of his expedition, has reproduced two photographs, and which he describes in the 'under-lines' as of the Wei period, about A.D. 500.[22] The close agreement which its plastic remains, as seen in these photographs, show with the sculptures of Yün-kang and Lung-mên places this attribution beyond all reasonable doubt. In the absence of any textual description, I am led to conclude that this early grotto is among those high up on the cliff which their position has rendered difficult of access as soon as the wooden galleries leading past them had decayed, and which consequently were better protected from risks of vandal damage and subsequent renovation than the rest.

Tasks remaining at Ch'ien-fo-tung.

But apart from such places there will still remain chances of important discoveries as long as the masses of drift-sand covering the foot of the cliff at both ends of the main group of caves is not cleared, nor a careful search made for any old work that may lie hidden behind the plaster of the frescoes now decorating the walls. All this and the thorough study of the remains actually exposed in respect of their technique, chronological sequence, etc., may well claim the labours of

[20] In 1913 M. Petrucci in a letter informed me that he believed himself to be on the track of a text in the Chinese Buddhist Canon likely to explain this wall-painting. But he does not appear to have been able to follow up the clue, if it was the right one, before his untimely death.

[21] See Fig. 245 and below, Chap. xxvi. sec. iv.

[22] See the illustrations in Pelliot, *Trois ans dans la Haute Asie* (reprint from the *Bulletin du Comité de l'Asie française*, 1910, janvier), pp. 12, 13. The text of the lecture contains no reference to these very interesting photographs.

years. It is with a due sense of the disproportion between the extent of such tasks and what a three weeks' stay allowed me to accomplish that I close here my account of the Thousand Buddhas and their treasures.

Section II.—LIST OF PAINTINGS, WOODCUTS, TEXTILES, AND MISCELLANEOUS ANTIQUES RECOVERED FROM CH'IEN-FO-TUNG

***Ch. 001. Painted silk banner.** Subject: *Bodhisattva* with glass bowl. All accessories lost, but painting in excellent condition, and typical of most highly finished style of Chinese Buddhist painting. For others see Ch. 009, 0011, 0016, i. 0010, xxvii. 003, xxxiv. 001, lv. 0019, and lviii. 004; and, amongst banners of smaller size, those enumerated under *Ch. 002.

Bodhisattva stands, turning slightly to L., on large open lotus; R. hand raised holding at shoulder level round bowl of mottled green glass with metal rim; head turned ¾ L. towards bowl, L. hand hanging by side with thumb and forefinger joined. Weight of body carried on R. leg, with all L. side relaxed, and fig. inclining slightly from feet to R. hip and again from R. hip to L. shoulder. This pose in itself suggests bearing of weight on R. hand, and calls attention to object carried.

Dress shows traditional Bodhisattva attire in its most elaborate form. It consists of trailing skirt of pale pink, with blue border, draping fig. from waist to feet. At waist its upper edge is turned over, and forms short white overfall, which is held round hips by a white girdle and leather (?) belt bound with gold. Below knees it is looped up by jewelled chains hanging from waist, and falls upon lotus at sides, while in front, over ankles, it reveals an under-robe of dull red with green border. End of white girdle hangs down ront of skirt in long fold, tied at intervals in butterfly knots and carrying at knee level a sq. jewel. Behind it hangs under-girdle, made of flat strip of red material figured with blue and white flowers; ends of both are draped about petals of Padmāsana.

Upper half of body nude, except for band of purplish-pink drapery crossing fig. from R. shoulder, jewellery, and filmy blue stole whose trailing lines and delicate transparent colour make one of the chief graces of the painting. It clings to shoulders and upper arms, is festooned across front of figure, and floats finally over lower arms to ground.

Jewellery consists of gold bracelets, armlets, earrings, tiara, and heavy necklet. On either side of latter, at shoulders, are set heavy jewels from which hang bunches of variegated ribbon streamers, and jewelled chains. The latter are gathered together by large circular jewel at waist, and then part again to loop up skirt at knees as described above. All jewellery set with red, green, and blue jewels, and necklet and chains are hung with tassels.

Head-dress consists of narrow fillet of white drapery, ending in short streamers at ears, and with narrow white band hanging in long loop to knees. In centre, over forehead, it supports light but elaborate gold orn. set with square upright jewel in middle and ending in two lotus buds which spring backwards over hair. At ears are flaming jewels and pointed lotus buds from which hang tassels on short chains.

Hair black, done in waves on forehead, with small lock hanging before ear, and on top of head in long backward-waving top-knot. Behind, it falls in heavy locks to elbows, forming dark background to upper half of fig.

Face of conventional 'Chinese' Buddhist type, with arched black eyebrows, small slanting eyes half-shut, heavy cheeks, and small full mouth with down-turned corners and drooping moustache, and tuft of beard on chin. Nose here is long and straight, but it is often a large aquiline and corners of mouth upturned. The down-turned corners, and wrinkles marked from corner of nose to mouth, give the face in this instance a somewhat sulky expression. The ears have long pierced lobes, and the insides are very conventionally treated. Setting of eye is here shown only by shading of flesh, but in many cases it is marked by semicircular line drawn round its inner angle. Flesh in all these banners left the natural colour of the silk, delicately shaded with faint pink to show the modelling of face and body. Outlines of flesh are all black, except inside of ears and inner sides of hands; but in most Bodhisattvas of this type all outlines are black. Eyebrows (and beard and moustache where present) are usually a green line over black.

Halo circular, with green centre surrounded by yellow band, within rings successively of red and white; and bordered finally by wide ring of transparent blue deepening to solid blue at outer edge. Canopy an elaborate gold (?) circle, dome-shaped in centre and having upturned edge orn. with tassels and flaming jewels.

The bowl is circular, flat-bottomed, incurving to a gold-rimmed mouth, and allowing the spread hand supporting it to be seen through. The lotus underfoot is a transparent pink, outlined with solid pink, as in skirt.

2′ 7½″ × 10″. Pl. LXXIX; *Thousand Buddhas*, Pl. XXIX.

***Ch. 002. Painted silk banner** with head-piece, streamers, and weighting-board complete, and in excellent condition. Smaller in size than preceding, but like it highly refined workmanship, and typical of the 'Chinese' Buddhist style in finished state of development. For other banners in same size and style, representing non-particularized Bodhisattvas, and observing same conventions in treatment of fig., dress, halo, canopy, valance, Padmāsana, and ornamental finish of picture, see Ch. 003, 0025, 0055, 0081, 0083, 0096, 00109, 00112–13, 00462–4; i. 002, 005, 007–8, 0013; iii. 001–3; xxii. 003, 0024; xxiv. 002. a–3, 006; xxvi. a. 008;

xxx. 001; xxxiv. 003; xlvi. 001–3, 0012; lv. 0013, 0026, 0044–5; lviii. 005; lxi. 007.

Ch. 002. Head-piece of lemon silk damask, loosely woven, with plain ground; pattern in twill of chevron bands touching at their angles and forming lozenges, in centres of which are diamond spots. Border of light red silk; suspension loop of white silk gauze. Streamers of dark blue silk coarsely woven and glazed; R.-hand side streamer replaced by one of similar silk, dark green. Weighting-board orn. with row of palmettes enclosed within elliptical borders whose ends form volutes at base of palmette; ground roughly painted red.

Subject: *Bodhisattva.* Stands $\frac{3}{4}$ R. on scarlet lotus, with head erect, R. hand in *vitarka-mudrā*, L. curved over breast. Fig. slightly thrown back from hips giving characteristic curve to the long draperies of skirt.

Dress, jewels, coiffure, and general treatment of fig. and accessories same as in *Ch. 001; except that drapery over breast is here part of complete under-robe tied in at waist and crossing fig. from shoulder, and that stole is of opaque material covering both shoulders like shawl. Face comparatively short and broad, with low forehead, straight nose and cheeks, small mouth painted scarlet, and narrow slightly slanting eyes with finely curved lines to upper and lower lid. Flesh extremely delicately shaded in pink on natural grey of the silk.

Colouring exceptionally fresh and well preserved. Predominant colours are deep maroon and dark olive-green, used for reverse sides of stole and thus giving solidity to upper part of fig. and outlining sweep of lower draperies with its long hanging ends. Amongst subsidiary colours are various pinks ranging from salmon-red to scarlet (on skirt and Padmāsana), slate-blue and green (on borders of robes and halo and jewels of Bva. and canopy), and yellow (on metal-work). Yellow cartouche for inscr. to R. of head, blank.

Painting 2′ $2\frac{1}{2}$″ × $7\frac{1}{4}$″, length of whole 6′ 1″. Pl. LXXXII.

Ch. 003. Painted silk banner, with head-piece, weighting-board, and streamers complete, and in excellent condition. Apparently companion to preceding, as size, gauze used for painting, and all accessories are identical, except for body of head-piece, which here is of fine cream silk gauze. Through suspension loop is knotted a loop of string, wound with variegated silk yarn of which traces remain, red, yellow, and green.

Subject: *Bodhisattva.* Stands $\frac{3}{4}$ L. upon slate-blue lotus, hands crossed over one another and hanging low before body. Fig. slopes somewhat forward to waist from shoulders and feet; straight backward-going lines of skirt draperies give it effect of advancing. Dress and general treatment as in *Ch. 002, and workmanship of same highly refined and skilful quality. Stole has slipped down from shoulders; breast also bare of under-robe or drapery.

Colouring subdued in tone, consisting chiefly of deep soft olive-green and slate-blue mingled, on stole, under-robe, borders of skirt, and lotus underfoot. Skirt itself transparent pinkish red as in *Ch. 002, and flesh yellower tinge of pink. Green and blue lightened by fine lines of white in folds, and white tips to lotus. Cartouche for inscr. to L. of head, blank.

Painting 2′ $1\frac{3}{4}$″ × $7\frac{1}{4}$″, length of whole 6′. Pl. LXXVII.

Ch. 004. Painted silk banner, complete and excellently preserved, head-piece and suspension loop of cream silk gauze bound with apricot silk; side and bottom streamers of dark green and dark blue silk resp.; weighting-board with enclosed palmette design in black on red ground.

Subject: *Dharmapāla Vajrapāṇi.* Chinese demon type, with muscular fig. and large head upon hunched shoulders; standing slightly to R. in tense attitude with feet planted apart on two lotuses, head turned back over R. shoulder, L. hand low by side supporting end of ornamental *vajra* which rises by head. R. hand, with fingers stiffly spread, steadies it half-way up.

Dress: scarlet *dhōtī* or short skirt, with slate border, reaching to knees and tied round hips with trailing white girdle; narrow stole, olive-green and pink; bracelets, anklets, necklace, and jewelled chain like Bodhisattva. Hair also like Bodhisattva's of *Ch. 001 type, in drooping top-knot and long locks behind shoulders, bound with white fillet, whose ends fly up fiercely at ears. Grotesque face with enlarged staring eyes, misshapen nose, and moustaches and beard in long straggling tufts. Exaggerated muscles are drawn in strong black lines and emphasized by painting in light red. Halo a disc of light green with flames creeping round edge; conventional thunder-cloud behind of purple and white; and draped valance in vandyked band above.

Yellow cartouche for inscr. (blank) to L. of head.

Colour bright and clean; drawing bold, following conventions of type but unexaggerated.

For replica see Ch. i. 006; and for other Dharmapāla banners, Ch. i. 004; xxiv. 001, 002; xxvi. a. 005; liv. 002; lxi. 006.

Painting 2′ $2\frac{3}{4}$ × $7\frac{1}{4}$″, length of whole 6′ $2\frac{1}{2}$″. Pl. LXXXVI.

Ch. 005. Fr. of wooden statuette, L. hand and forearm. Elbow end cut smooth and keeps abundant traces of glue by which it was fastened to upper arm. Glue also by knuckle of little finger where hand was attached to body. This side of arm not at all finished. On wrist bracelet with central row of beads, and two tassel orns. up arm. Nails on thumb and first two fingers carefully marked. Boldly chiselled work. Length 4″; across wrist, $\frac{1}{2}$″. Pl. XLVII.

Ch. 006. Wooden statuette. L. arm and L. foot broken off; R. arm upraised; heels together and knees outbent; large head. This and protuberant belly suggest that child is intended; features, however, angular and mature. Round waist narrow loin-cloth. Roughly chiselled work; features of face marked by deep incisions. H. 4″. Pl. XLVII.

Ch. 007. Wooden statuette in half-round for relief; Gandharvī (?) flying R. Arms and legs below knees missing; features of face much damaged. Hair done in three tiers of curls of which lower slopes sharply from forehead to shoulders, framing face, and uppermost forms small top-knot. Face long with high forehead. Body nude to below breasts, then thin vest clinging closely to body; thick robe rolled round

hips and falls in heavy folds over legs. Legs from hips bent to spectator's L.; at knee flexed, L. lower leg passing behind R. in common attitude of flying Gandharvī. Lower drapery boldly but naturalistically rendered by deeply incised grooves. Fig., in particular flesh parts, carefully finished. Whole shows traces of thin coat of light brown lacquer. Very fine work. H. 8". Pl. XLVII.

Ch. 008. Wooden statuette; male (?) fig. standing upright. Head, arms, and feet made separately and missing (dowel holes for head and L. arm). Body, nude to below navel. Here skirt of heavy drapery tied tightly round loins, contracting body; it makes short overfall, and lower part descends in straight heavy folds to ankles; ends of girdle hang down in front almost to edge of drapery. Carefully finished but poorly designed work. On flesh parts all tool-marks are smoothed away, drapery left rather more rough. Folds of garments, stiff, symmetrical, and insufficient; body ill-proportioned and anatomical divisions hard and stylized. Traces of dark paint. H. 6¾". Pl. XLVII.

Ch. 009. Painted silk banner with head-piece of figured silk; all streamers lost. Banner of pale grey silk gauze, broken about top and bottom. Otherwise well preserved, and colours fresh. For descr. of figured silk see below.

Subject: *Bodhisattva* (unidentified) with censer. Fig., short and broad, stands facing spectator on blue lotus, head turned slightly towards L. shoulder; R. hand raised holding smoking censer; L. arm also bent at elbow and forearm extended, hand open and fingers spread (third bent). General type as *Ch. 001, and dress and jewels same in main but less skilfully treated.

Instead of scarf across breast, Bodhisattva wears under-robe as in *Ch. 002, and also additional scarf made of flat-shaped band of figured material. This scarf hangs in loop from shoulders to waist-level, and again from arms to knees in long V-shaped point, the extra length thrown in loop over L. arm. The skirt is pink with folds outlined in red, and lower border of dull blue and lemon yellow; overfall is white edged with plum-colour; girdle white; under-girdle a flat band of crimson edged with lemon yellow and orn. with spot pattern of rosettes in white and blue. Under-robe crimson with olive and yellow border; stole a gauzy transparent veil of soft dull blue; the scarf crimson with a spot flower pattern in green and lemon-coloured edge, the reverse side green with gold flowers; jewels and tassels blue and green. Tiara carries over forehead large purple bud, behind which spring two scarlet lotus buds with white flower between them resembling pheasant-eyed narcissus.

Face has low forehead with long narrow protruding nose, and broad projecting jaws and chin crookedly drawn. Eyes almost straight, their setting marked by semicircular line round inner corner. Top-knot in double leaf form. All the flesh tinted pink and outlines drawn in black, except inner side of hands and ears, soles of feet, and edge of lower eyelid, which are red. Eyebrows are a green line over black. Censer is of gold, with long handle, and round bowl with spreading foot.

Lightness of general effect is preserved by pale tone of silk itself and transparent washes in which colours of flesh and more voluminous garments are applied. But the fig. is overloaded by the innumerable scarves, streamers, and draperies, and there is a lack of predominant hues and lines. The colouring is excellently preserved. For Bodhisattvas with the same attribute and pose of hands, see Ch. 0083; i. 005. 2' 8¼" x 10¼". Pl. LXXIX.

Ch. 009. Head-piece of thick figured silk, with border of fine putty-coloured silk, cane stiffener sewn to lower edge, and yellow silk suspension loop at top. One Chin. char. on border. Figured silk, woven in firm satin twill with fine warp and broader untwisted weft, shows part of Sassanian pattern. On old-rose ground rows of elliptical medallions with old-rose field and borders of bright green, set out horizontally across material; rows about 1½" apart and medallions in each all but touching each other laterally. Alternating with them rows of smaller indented quatrefoil panels, occupying spandrels between opposing arcs of each four medallions.

Green medallion borders orn. with large hexagonal white discs; within, pairs of confronting deer, standing on flat symmetrical base like palmette cut flat across the top. They are striding, have heavy branching horns and long tails, and are woven in deep orange-yellow, bright green, old-rose, and white. Treatment stiff and conventional, with stepped edges throughout. The bodies (here not seen) preserved in another fr. of same material, Ch. 00359. a, where they are shown to have indented quatrefoil rosettes in reddish pink, white, and green on shoulder and haunch.

Spandrel panels have green ground, on which similar pairs of confronting geese woven in same colours as deer. Tips of their wings strongly curved up, and both their legs visible, although otherwise they are seen in strict profile. Their heads well characterized, distinguishing them from equally striking ducks of Ch. 00359. b.

Material excellently preserved and colours bright and fresh. For further remarks on relation of design to others in Collection, and to Sassanian stuffs from other sites, see above, pp. 908 sq. Base of head-piece 1' 3", h. 8¼". Figured silk as preserved, Pl. CXI; reconstructed design from this fr. and Ch. 00359. a, Pl. CXV.

***Ch. 0010. Painted silk banner,** representing *Lokapāla.*
General Note.

Among the twenty-four Lokapāla banners in the Collection, two classes of figs. may be roughly distinguished. But they differ only in style of treatment and in detail, the general character of figs. and armour being essentially the same throughout. The two styles, also, are intermingled in many of the banners.

The original type of fig. appears to be that fully described under Ch. xxvi. a. 006; other instances are found in Ch. xlix. 007 and lv. 005. The origin of the elaborate form of defensive armour represented is certain, but it has been suggested that it was not Chinese, though frequently reproduced in China and Japan in the T'ang period. (See Laufer, *Chinese Clay Figures,* Pt. 1, pp. 300–1, Pls. LI sqq.,

Figs. 46–7). It is hence of interest to note that the three banners mentioned above are associated with Bodhisattva banners of markedly 'Indian' type. From their uniformity in size, borders, pattern of ornamental band at foot, and streamers, as well as from general similarity of workmanship, the first two evidently formed part of series described under *Ch. xxvi. a. 007; and Ch. lv. 005 as certainly belongs to that enumerated under *Ch. lv. 004. In a series of paintings obviously produced at the same time, and probably intended to form a complete set of representations of the more important deities, it is probable that the artist drew his inspiration for all figs. from the same source. Throughout the Lokapāla descriptions the type is called 'Indian' merely for convenience, and in default of a term boasting greater justification.

For detailed description of each type, and complete list of examples of each, see under *Ch. 0035 and Ch. xxvi. a. 006 resp.; for Lokapālas of mixed or unique type, see Ch. 0085, 0087, 0098; 00106; xxvi. a. 001; liv. 003; lv. 0046; lxi. 001. The characteristics in which all figs. agree, including a general description of dress, are given below.

The Lokapālas stand always upon a crouching fig.—in all but one instance (Ch. 0087) a demon. They are mostly of fierce aspect, a few almost monstrous in type (e. g. *Ch. 0035); but the majority have human features though treated with exaggeration; large rolling eyes, frowning eyebrows, grotesque noses, and snarling mouths (*Ch. 0010; lxi. 001). A few are drawn with real dignity and seriousness (Ch. 0040; lv. 0020). Their dress is an elaborate mixture of the warrior's and the king's, the warrior's predominating; the chief parts are the same in all. It consists of (i) coat of mail or doublet; (ii) corslet or breastplate; (iii) mantle; (iv) stole; (v) skirt or tunic of woven material; (vi) leg-covering; (vii) forearm guards; (viii) greaves; (ix) shoes or sandals; (x) helmet or tiara.

(i) The *coat of mail* is of scale-armour, evidently leather of type found at Mīrān Fort (see above, pp. 477 sqq., M. 1. 0069, etc.). It is in form of a close-fitting shirt or tunic covering body from neck to thighs and extending half-way down upper arm. It is girt round hips with decorated (leather?) belt, and under breastplate by second belt or twisted girdle of drapery; it is finished off at bottom by short pleated frill which falls upon thigh. At elbow it is generally finished also by pleated frill. In the 'Indian' type of figs. (see below), skirt portion below hip-belt is very long, reaching to the knees or even below (Ch. 0087), and is slit up the front to give more freedom to legs. In these figs. also an additional shaped piece of plain leather hangs from hip-belt over upper part of skirt. It is cut in two deep flaps over hips and in a third flap or apron in front, sometimes gaily decorated. The hip flaps are sometimes made of tiger-skin (Ch. xxvi. a. 006 and Ch. 00106).

Scales of coat proper are always oblong in skirts, and round-edged in upper parts, except where otherwise stated; but portion between hip-belt and corslet is occasionally painted plain as if made of whole leather (Ch. xlix. 007; lv. 005); in one instance whole coat is so painted (Ch. lv. 0017). The oblong scales appear to overlap *upwards* (cf. p. 464), where any indication is given by shading of under end of scale (Ch. 0087, 00107; lv. 0020; lxi. 001), but in many cases there is no indication (Ch. xxvi. a. 006). The round-edged scales always overlap *downwards*, except in Ch. xxvi. a. 002 where overlapping side is at top (but cf. also Ch. 00106).

(ii) The *corslet or breastplate* appears in slightly different forms: sometimes as a breastplate pure and simple, covering upper part of breast and passing over shoulders, like a wide collar or yoke (*Ch. 0010; xxvi. a. 001; lxi. 001); sometimes as a corslet, fitting round body under arms. This is the most common form (Ch. lv. 0020; xxvi. a. 002; lv. 005; xlix. 007), being usually buckled over shoulders by straps. Where the Lokapāla wears a mantle (Ch. 0022, *0035) it is impossible to see how the corslet is attached, but prob. by this method (Ch. lv. 0046). Sometimes breastplate and corslet seem to be combined (Ch. 0085; lxi. 001). The corslet is made of bright-coloured leather (?) orn. over breasts by discs of contrasting hue set with gold orn. or jewel at centre. Down middle runs a broad strap, also of different colour, sometimes attached to upper belt only, sometimes continued down front of coat of mail to join hip-belt. Latter is usually strengthened at this point by a semicircular centre-piece of leather or metal (?), which may be in form of beast's head (Ch. 0040; xxvi. a. 006), whether corslet strap is brought down to it or not (Ch. 0022; xlix. 007; lv. 005).

(iii) The *mantle* is found only in some Lokapālas of Chinese style (*Ch. 0035). It appears merely as dark drapery brought over shoulder from behind and knotted under chin. Where it is absent, the neck is sometimes exposed (Ch. 0085; xxvi. a. 001); sometimes protected by a round sausage-shaped collar clasped in front (Ch. xxvi. a. 002, 006; lv. 005).

(iv) The *stole* appears in most instances, sometimes hanging round shoulders and twining about arms; sometimes knotted to belt at hip and festooned across arms in front of body. It is of varied colours on reverse sides, and its treatment varies as in various classes of Bodhisattvas' stoles.

(v) The *skirt* or tunic. This appears in form of short skirt beneath coat of mail; it is almost invariably red with blue, green, or brown border, and has a white lining edged with red. It is drawn up short of knees in front, as in case of Dharmapālas and other active divinities, and the ends float away at sides. The end of a long knotted white girdle like that of the Bodhisattvas (*Ch. 002) also curls about legs. From under coat of mail at elbows, there appear also in many instances wide mouths of sleeves corresponding to skirt in colour, and evidently part of same garment.

(vi) The *leg-coverings*. Beneath tunic are seen knees, sometimes bare (Ch. 0040), but generally covered with white drapery, which is either tucked into greaves (*Ch. 0010), or swathed round the leg and tied under knee (*Ch. 0035). Over the knee the breeches (or stockings?) are sometimes orn. with a painted rosette (Ch. 0085) or scattered floral sprays (Ch. lxi. 001).

(vii) and (viii) *Arm-guards and greaves*. Forearm and lower leg are encased in tight-fitting guards, prob. of stiff leather like corslet. The greaves are generally made in one piece, with a metal band or row of clasps down front, and large disc of differently coloured leather, usually bound with

gold and set with central gold boss and jewel, covering the calf. Among the 'Indian' Lokapālas, however (see below), the greaves are sometimes made in three horizontal bands bound with metal (Ch. lxi. 001). These are sometimes painted as if of scale armour (Ch. 00106; xxvi. a. 001), while in one case (Ch. 0085) they are of scale-armour from top to bottom without bands. They are finished at bottom by ankle-guards, in form of a stiff metal (?) ruff, like a ray of pointed petals. The arm-guards are of corresponding pattern.

(ix) *Shoes or sandals*. The shoes may be black and close-fitting, either plain or orn. with gold scroll-work. These are found only in case of the 'Indian' figs. (see below). The more Chinese type of Lokapāla wears either plain sandals, with single toe and heel-strap exposing foot (Ch. 0040; lv. 0020); or woven shoes of cord (Ch. 0022; xx. 0011; lv. 0046). These shoes are made with a long opening down the front, the ends of which are tied up by a string drawn close round ankle. For the same pattern found (in cloth) at the Mīrān Fort, see M. i. ii. 0025; also L. A. vi. ii. 0025; T. xiv. a. 002, etc.

(x) The *helmet or tiara*. These are found indifferently in variations of both types, but tiara more common. It may be of heavy all-metal type (Ch. xlix. 007; lv. 005), or of white fillet variety orn. with jewels and with light streamers flying up at ears (Ch. lv. 0018, 0020). Helmet is close-fitting with projecting rim and gorget (Ch. 0040) or sausage-shaped collar (Ch. xxvi. a. 006). Third variety seen in Ch. xxvi. a. 002.

The halo is in all cases a plain circular disc, and the *demon* underfoot a thick-set half-monstrous fig. with grotesque features squatting or crouching in a contorted position. He is nude except for red loin-cloth, and simple necklace and bracelets; he has generally glaring eyes, red or green hair, and tusks instead of teeth.

***Ch. 0010. Painted silk banner**; complete except for weighting-board and excellently preserved.

Head-piece of cream-coloured silk, with broad edging of salmon-red; suspension loop of brocade, much worn, apparently same as Ch. xlviii. 001, and strung with a bronze ring; side-streamers of thin myrtle-green silk with flower and insect motifs in paste; bottom streamers of sage-green silk, discoloured.

Subject: *Virūpākṣa, Guardian of the West.* Stands facing spectator on head and knee of contorted demon; weight thrown on R. hip, L. foot on higher level than R., and L. knee bent. L. hand at waist holds a naked sword upwards and aslant across body, R. hand supporting blade at breast; head turned towards R. shoulder.

The pose is that of the more 'Indian' Lokapālas (see Ch. xxvi. a. 006), and the dress a variety of the same, but decoratively treated with great elaboration of detail. Drawing, though mechanical, is however less stiff than in that type, and Chinese influence is seen in cloud-like scroll behind halo, in small flowers spotting border, and in demon face of King and his supporter.

Scale-armour round-edged on shoulders, body, and skirt alike of coat of mail, painted red and white on body and arms, black, green, and white on skirts and shoulders. Skirt has a red border and pleated green edge, and is slit up in front, showing similar flap below. Apron and flaps over hips are of blue leather cut separately, orn. with metal-work and jewels, and with small green flaps underlying between them. There is no corslet, but a breastplate as in Ch. xxvi. a. 001, also of light blue leather elaborately orn. with metal-work, green jewels, and white beaded borders. An open metal-bound collar, also orn. with beads, is round neck, but latter exposed in front. There are no arm-guards, but lower arm is covered to elbow by frilly blue, and then by heavier red swathed draperies evidently from tunic. The latter is orange and red with blue border; the leg-covering white, tucked into greaves.

Greaves are of red and blue leather (?), orn. with scrolled metal-work, and with appliqué discs painted in scale-pattern, green, black, and white; showing that much of painting was done unintelligently with an eye solely to decorative effect. The shoes are black, also shod and bound with metal-work. Green stole, lined with pink and white, hangs round shoulders and arms to ground; and another, green and brown, is knotted to hip-belt.

Flesh painted a uniform light pinkish red, and hair light blue; the latter in close festoons on forehead and bunched back behind ears in wig-like mass. Face is heavy with frowning forehead, glaring round eyes with green irises, aquiline nose, and snarling mouth showing teeth and tongue. Ears are elongated, with rings. Head-dress a solid metal tiara with wing orns. and upward white streamers at ears, and a high solid crown spreading outwards at top. All metal-work except sword (which is light blue) is painted in yellowish brown picked out with yellow, perhaps intended for bronze.

The halo is pea-green, without flames, but with dark carmine cloud curling above; the whole upper end is strengthened by blue silk patch sewn on behind. The demon sprawls on his back, clasping Lokapāla's leg with his R. hand.

The colouring consists chiefly of orange-red, green, and blue, with accessories in white and brown, and is exceedingly clear and fresh. But the fig. is so broken up by intricate detail that no hue or line predominates and the eye is lost amongst a medley of bright-coloured patches. In this concentration on detail and ornament, and lack of spontaneity, it closely resembles Ch. xxvi. a. 001.

Yellow cartouche for inscr. to L. of head, blank.

Painting 2′ $2\frac{1}{2}''\times 6\frac{7}{8}''$, length of whole 6′ 1″. Pl. LXXXIV.

(*N.B.* The painting is described from finished side; but has been reproduced from the other, showing fig. reversed, as position of hands makes it clear that this was intended for the front.)

Ch. 0011. Painted silk banner; all accessories lost and both ends of painting including Padmāsana; condition otherwise good.

Subject: *Avalokiteśvara* (?). Stands slightly to L., R. hand raised holding red lotus spray, L. palm out at breast with third finger bent and others extended. Painting of *Ch. 001 type; dress and ornaments same except for arrangement of skirt. This is tucked up at knees, giving appearance of short full trousers; girdle and tasselled chains dangle about bare legs below. Skirt painted in horizontal bands, orange above, crimson below, and in middle green with flower pattern in red and black. There is no stole, but jewellery elaborate and plentifully set with red and blue stones. Legs are orn. with anklets. Face large and long, with wide semicircular lines to mark setting of eyeball, and small green moustaches and imperial. Colouring light and fresh. 2′ $7\frac{3}{4}$″ × $10\frac{1}{4}$″.

Ch. 0016. Painted silk banner; upper edge and all accessories lost. Torn across at level of fig.'s eyebrows and repaired in antiquity. Otherwise excellently preserved, and colours fresh.

Subject: *Avalokiteśvara* (Kuan-yin). Stands $\frac{3}{4}$ R. on blue lotus, R. hand raised carrying spray of weeping willow, L. hanging by side; head somewhat uplifted. Draperies, style of fig., and treatment as in *Ch. 001, but work less delicate. No stole and no under-robe; raised skirt showing bare ankles with anklets. Colouring is of transparent type as in most of larger banners. Skirt left the natural colour of the silk delicately shaded with faint pink and crimson, and stamped (irrespective of folds) with repeating leaf spot in green; flat under-girdle crimson; jewels, tassels, and streamers crimson and blue; gold work a pale yellow; tiara orn. with purple lotuses and red jewel; scarf across body green. Face short and rather puckered, with very small eyes, protruding nose, and large full mouth. Ears large but not elongated, and unadorned. All outlines black. On R. edge blank cartouche for inscr. 2′ $7\frac{3}{4}$″ × $10\frac{1}{2}$″.

Ch. 0017. Painted silk banner; edges gone and all accessories, but fig. almost intact.

Subject: *Bodhisattva* (unidentified). Painting of the coarser 'Indian' type as *Ch. lv. 0014 (q. v.). Fig. stands facing spectator on two lotuses with down-turned petals; R. arm bent up at elbow and hand extended again downwards with first finger bent; L. hand held drooping before breast, thumb and third finger joined. Skirt of shaded pink, girdle dark green; stole of green and indigo; scarf across breast green and Indian red; blue gauzy veil on shoulders not appearing below. Flesh is painted white and shaded with salmon-red; treatment giving fuller and rounder appearance to fig. than in flat companion painting *Ch. lv. 0014. Outlines of fig. red and of drapery black; hair blue; eyes slightly oblique. All lost above eyebrows.

The silk had previously been used for another painting, as is shown by remains of halo outlines and of head and ear, visible on L. breast. Blue veil on L. shoulder was apparently added to blot out some of traces. 1′ 6″ × $6\frac{3}{4}$″.

Ch. 0018. Silk painting representing *Vaiśravaṇa* with attendants crossing the ocean. Painting on small scale, with band of yellow silk at bottom and purple silk border all round; the latter $1\frac{1}{2}$″ wide at sides and foot, but $3\frac{5}{8}$″ at top to balance the double border below. Condition excellent.

V. and his followers advance to R. on curling maroon cloud which rises behind them into sky. Sea is painted in a series of regular ridges, crested with white, and is bounded far in the background by a range of blue and green mountains, prob. meant for Meru. In sky a demon with bat's wings, meant for Garuḍa, flies to R. In R. top corner yellow cartouche (blank) for inscr. V. strides in front of his attendants, carrying double-headed halberd with R. hand; from his raised L. hand a cloud floats up containing a shrine with Chattras.

His dress, generally speaking, that of the more elaborate and 'Chinese' Lokapālas in banners (see *Ch. 0010, *General Note*); but skirt of coat is exceptionally long for this type, reaching almost to knees. A peculiar arrangement of scales, seen also in Ch. xxxvii. 002 (Pl. LXXIII) and Ch. xviii. 002 (Pl. XC), is conventionally represented by diaper of three-armed stars (for a closely resembling representation of scales, see Laufer, *Chinese Clay Figures*, i. Fig. 50, p. 304, reproducing a woodcut illustration of a 'Lion armour' of the T'ang period); and is shown over corslet, as well as over body and skirt of coat. Forearm guards and small visible portion of greaves are also represented in oblong scales bound together at regular intervals by transverse bands; and these, as well as coat, corslet, and shoes, are gilded. A hawk or eagle mask forms stomacher, and shoulder-pieces end in lion-head, through open jaws of which arm passes.

There is no mantle, collar, or helmet; but copper-green stole is looped to hip-belt and falls back in long streamers over shoulders. On head a high three-leaved crown with flame or wing orn. on top, white streamers flying up at sides. From shoulders also rise streamers of flame. Face is full and heavy in lower part, but not grotesque, with large oblique eyes and heavy eyebrows; hair is blue, nose aquiline, mouth in slight grimace. Pose and build of fig. recall wooden Lokapāla statuette, Mi. xv. 0031 (Pl. CXXVII).

A nymph bows before him, presenting dish of flowers. Her identity is uncertain, but she resembles Goddess of Virtue found in representation of Thousand-armed Kuan-yin; see *Ch. 00223, etc. She wears here green skirt, short fringed tunic, and, over all, scarlet jacket with sleeves so wide as almost to sweep ground. Her hair is done, above leaf-decked tiara, in two high narrow loops like Queen Vaidehi's in side-scenes of *Ch. 0051, etc.; acanthus-like leaves lie over her shoulders, and strings of narrow pointed leaves hang in wreath over her arms.

Behind V. come rest of attendants. Four are demons: two in background, with blue-grey flesh, fiery hair, and tusked jaws, one of them carrying elaborate flag, which shows a lozenge-patterned field with rainbow-coloured border and vandyked banderoles. Another in front of them, with brown skin, hairy arms, and animal-like head wrapped in scarlet hood tied under his chin, carries large round pink and white jar with flat covered mouth.

In foreground, the fourth, brown-skinned, with ferocious animal head, carries club. His dress is a modified form of armoured Lokapāla costume, scale-armour appearing only on the corslet (two narrow rows of oblong scales across breast)

and round waist and upper part of skirt. Body and arms otherwise covered by a close-fitting embroidered scarlet jacket; skirt finished off by leopard-skin fringe. Legs bare except for greaves.

The remaining four attendants, clearly individualized, evidently represent definite personages (not identified). Foremost is an aged man, clad only in short white *dhōtī* or skirt, with white scarf across breast; sandals, armlets, and earrings. His white hair tied in top-knot on head, and he has long white eyebrows and beard and sunken features. Eyes, level, turn with sidelong glance to rear. In R. hand he carries gilded cup (or *vajra* ?).

Next to him portly male fig. in green robe and black-and-white patterned under-tunic, with high three-leaved (?) head-dress from which drapery falls behind neck, full clean-shaven face and calm expression. He carries flaming jewel on gilded stand.

In rear a bearded archer, bending down with a vigorous movement to fit arrow to his bow while his gaze follows the demon in the sky. An air of purpose inspires whole fig., and the drawing is particularly firm and vigorous. His dress seems to consist of blue tunic which leaves R. arm and breast bare; white breeches, and top-boots (?). On his head is curved conical cap, white with metal veining and metal boss at top, and upstanding brim round back and sides rising in a high point at back. Last is a man with oblique eyes, black hair, in long white under-robe and full-sleeved maroon jacket, with hands in adoration. On his head is the 卌-shaped head-dress, gilded.

The fabrics throughout gaily patterned, chiefly with rosettes in hexagonal diaper. Colouring consists of brilliant scarlet, copper-green, cobalt, white, and gilding against maroon cloud and greenish brown of the sea; for the sea is not otherwise coloured. The drawing masterly in its cleanness of touch and range of expression, and the workmanship throughout very highly finished in the somewhat precise 'calligraphic' style of illumination. Painting 1′ 2⅞″ × 10½″, with border 1′ 10⅞″ × 1′ 1¼″. Pl. LXXII.

Ch. 0019. Fr. of painted silk banner, representing the *Descent of Buddha*. To R., Māyā, in red robe, lies on L. side asleep upon couch; to L. appears white elephant, at gallop, in whirlwind of red and blue cloud which covers Māyā's feet. Astride its back, on blue cloth, rides infant Buddha, naked except for loin-cloth, hands joined as in prayer; orange-red halo behind him. Dress, couch, and style of work Chinese, as in Ch. lv. 009, etc. For other representations, see Ch. 0039 and lv. 009. 4¾″ × 2⅛″.

Ch. 0020. Three wood-cuts on paper, from same block; showing small oblong panel divided into four compartments, each containing demonic *Vajrapāṇi*. Poor design, roughly cut and printed. 4⅝″ × 2⅜″.

***Ch. 0021. Silk painting** with Chin. inscr. (illegible), representing *Kṣitigarbha* as Patron of Travellers and Protector of Souls in Hell, with attendants and donors. Complete with border of faded dark purple linen; in good condition.

Kṣitigarbha is seated facing spectator on rock covered with figured cloth; R. leg pendant and resting on lotus, L. bent across; L. hand holding beggar's staff over shoulder, and R. ball of crystal on knee. He wears green under-robe ending in scarlet and white folds over L. arm, and mantle of grey mottled with black, red, and green, and barred with yellow. Traveller's shawl, grey orn. with spot pattern in yellow, is bound round his head and falls on his shoulders; only jewellery necklace and bracelets. Flesh painted white outlined with red; oval halo and round vesica, green, red, and white, bordered with flame, make background to fig. Above as canopy, conventional flower spray hung with strings of jewels.

Down either side are ranged five Infernal Judges, sitting at draped tables on which scrolls of judgement are spread. Attendants in secular Chinese dress wait on them, holding fans, taking instructions, or delivering reports. In one case attendant holding fan is a demon. All judges but one wear magisterial Chinese dress: long under-robes, voluminous wide-sleeved coats (scarlet and white, grey-bordered), and official head-dresses. One of these is trencher-shaped oblong, with fringe hanging from ends; others are white folded caps with wings curling upwards crescent-wise at sides, or tall narrow hats in black and yellow with square piece rising from forehead and stiff brim standing up high all round rest of head and hiding the head-piece. The tenth judge is clad in full armour, helmet and coat of mail with tiger-skin fringe reaching almost to ankles.

In front of Kṣitigarbha is seated white lion (symbolic of Buddhist preaching ?) with a priest and a man on one side raising their hands in adoration to K. The only two cartouches bearing inscriptions, of the many in yellow, green, and purple scattered about, relate to these figs. and are illegible. On other side is a condemned soul, naked except for loin-cloth, led by an ox-headed demon and wearing the *cangue*, regarding in magic looking-glass the crime for which he has been condemned—the murder of an ox. Cloud above glass indicates that scene is a vision. Beside it stands an attendant, prob. of one of the judges, holding brush and scroll.

Foremost of donors on either side is a monk holding a censer. Behind the one stands a boy attendant holding the *ju-i*, or fungus, sceptre; behind the boy again kneels a man, and behind the other monk two women, in civilian dress of *Ch. 00102. It is unusual to find monks and women on same side; but the strongly marked features of religious personage on L. seem meant for a man's, and there is no sign of usual blue hair, white skin, and pink cheeks of nun.

For other silk paintings of Kṣitigarbha in this guise, see Ch. 0084, 00225, 00355; i. 0012; xxviii. 003; lvi. 0017; lviii. 003; and lxi. 009; (linen paintings) Ch. 0060, and (paper) Ch. lxiii. 002. 3′ × 2′ 2½″. Pl. LXVII; *Thousand Buddhas*, Pl. XXV.

Ch. 0021. a. Fr. of painted wooden vesica and halo, cut in one piece. Field of both green outlined with bands of pink and white; outer border of creeping flames, successively of shaded pink, green, orange, and blue. Length 9½″.

Ch. 0022. Painted silk banner, with fr. of Chin. inscr. Upper end of painting lost; otherwise in good condition and all accessories preserved. Colours fresh.

Head-piece of plain cream silk gauze, bound with glazed silk of pale pink; suspension loop of completely frayed silk brocade on which is strung a bronze ring; whole roughly sewn together and evidently hasty substitute for the orig. top. Side streamers are of pale grey, and four bottom streamers of greyish-blue silk orn. with leaf and insect motifs in black paste. Weighting-board (detached) is painted dark red, with lotus and leaf design in green, black, and yellow.

Subject: *Virūpākṣa, Guardian of the West*; identified from remains of Chinese inscr. A replica of *Ch. 0035 and xx. 0011; with slight variation of colour only from *Ch. 0035. All lost above Lokapāla's mouth; lower end here complete shows shoes which are of woven string (see *Ch. 0010, *General Note*), and half-squatting, half-crouching demon who supports his feet on R. hand and L. knee. Inscr. on lower end of cartouche in upper L. corner.

Painting 1′ 5″ × 6½″, length of whole 6′ 3½″.

Ch. 0023. Painted silk banner; complete except for weighting-board and upper end of painting, and in fair condition. Head-piece of buff silk gauze, painted in floral design but now in fragments, mounted on plain blue silk and bound with light red damask inwoven with lozenge pattern as Ch. 00340. Suspension loop of pink silk and streamers of olive-green, the silk streamers orn. with leaf patterns in black. (Painting has been reattached to head-piece in mounting.)

Subject: *Mañjuśrī* on white lion; the whole ¾ to L. For other examples, see Ch. 0036. M. sits cross-legged on pink lotus; R. hand open on knee with thumb pointing up; L. raised, open, with second and third fingers bent. Head slightly raised and eyes looking up under heavy lids.

Bodhisattva of type *Ch. 002 in dress and features; but jewellery simple. Lion same in attitude, type, and trappings as in Ch. 0036; with green mane, slate-blue eyebrows, beard, and tail, and pink shading on breast and jaw. M.'s dress is slate-blue, crimson, and olive; lotuses under lion's feet crimson and green. Remains of dark pink cloud in Chinese style, at top; and blank cartouche for inscr. to L. of head. Workmanship skilled but lifeless.

Painting 1′ 8″ × 7⅝″, length of whole 5′ 4″.

Ch. 0024. Silk banner, retaining all accessories except side streamers, and in fair condition.

Head-piece of plain silk, doubled; each side painted with roughly triangular floral design, showing elliptical open flower, blue, six-petalled, with green and red centre, surrounded by green leaves veined with black, the whole on a crimson background. Converging sides bordered with plain greyish-blue silk, and suspension loop at apex of printed silk with floral pattern in light yellow, green, and blue. Bottom of head-piece held between two cane stiffeners, ends of which pass into binding upon each side. The exposed length wound round with raw white silk and bound with bands of silk, dark purple, yellow, green, and red, crossing each other diagonally.

Four bottom streamers (one incomplete) are of dark olive silk gauze, woven in same lozenge diaper as in Ch. 00344, and stamped with bird, flower, and insect motifs as in Ch. xvii. 001. Weighting-board consists of layers of coarse woollen material, dark brown and natural-coloured, glued together and covered with light red gauze similar to that of streamers; then lacquered dark red on each side, but lacquer now mostly lost. It is attached to stiffener of streamers by three loops of red silk thread, sewn along top; edges of holes strengthened with strips of bronze foil.

Banner proper made of dull red silk damask woven with small conventional floral pattern like Ch. 00345, in bands 3½″ apart; and orn. with naturalistic design of two flying ducks, carrying trailing sprays of water-plants in their bills. Drawing, somewhat rude, in black ink, touched up with same white or silver (?) paint as used on banner streamers, now gone whitish grey. Band of scroll pattern below.

Banner proper 1′ 5″ × 5½″, length of whole 3′ 11″.

Ch. 0025. Painted silk banner of pale grey gauze covered with fine coat of silvery white paint or glaze. This has apparently prevented tracing from passing to back of silk; for while the banner is painted on both sides, the outlines (except for eye) appear only on one. Upper part showing canopy has cracked, and over it has been pasted fr. from edge of another silk painting.

All accessories complete and in good condition. Head-piece of cream silk gauze, unlined, and with binding of pale pink silk hastily sewn together, evidently a substitute for properly finished original. Side streamers of green silk; bottom streamers of grey silk stamped with running scroll of stem and leaves in blackish-grey paste; weighting-board painted dark red with flower and leaf design outlined in grey.

Subject: *Bodhisattva*, carrying mottled glass jar on which rests scarlet lotus. Attitude unusual, fig. walking from spectator, to whom it presents ¾ back view (to L.); head turned back over R. shoulder; R. hand raised carrying jar, and L. by side gathering up fold of robe. Fig. and accessories generally of type *Ch. 002; dress same as seen from back. A bow of drapery coming from in front is tied at nape of neck, and falls in long ends behind; jewelled chains gather up skirt in a sort of panier. Hair done in rounded mass at corner of head, and swings in two locks over R. and L. shoulder, leaving back clear.

Face curiously treated, outline drawn by forehead, cheeks, and upper lip; nose added as an excrescence, and mouth and very small chin awkwardly joined on below. The whole of the eye (curved and very oblique) is seen. Hands and L. foot, coming out below robe, also appear out of joint, owing to difficulties with perspective. Workmanship highly finished; colouring, like pose, unusual, consisting of yellow shaded with red (on skirt), but otherwise entirely of cool dull greens, putty-colour, and white. Halo, a disc of greyish white hardly standing out from background. No blue.

Painting 1′ 10½″ × 7″, length of whole 5′ 8″. Pl. LXXVII.

Ch. 0026. Strip of figured silk from back of Buddhist devotional hand-book, Chinese, printed A.D. 949. Weave firm satin twill similar to Ch. 009, but somewhat finer; warp sized. Ground burnt orange; pattern dark

green and white. Strip made of three frs., showing part only of sq. medallions stiffly rounded at the corners and measuring *c.* 2¾" to 3" when complete. They have orange outer borders, and dark green inner borders studded with white discs, and, within, a trio (?) of upright stems ending in large sq. palmettes. Adjoining medallions are separated by stiffly curving bands broken by an angular, much conventionalized, leaf (?) orn. in orange and white.

Pattern seems of Sassanian origin, akin to Ch. 009 group. Stepped outlines of latter appear only in modified form at rounding of medallion corners; in this as well as in form of palmette buds it resembles the prob. Persian-woven Cock stuff of Vatican (Dalton, *Byzantine Art and Archaeology*, Fig. 440), palmettes in latter case appearing in spandrel ornaments. 5½" × 1½". Pl. CXII.

Ch. 0028. Silk painting representing *Avalokiteśvara* (Kuan-yin), standing, without attendants; cf. series under *Ch. 0088. Complete and in fair condition, border lost. Fig. stands facing spectator on two small lotuses; R. hand raised supporting willow spray on palm, L. by side holding flask; Dhyāni-buddha on tiara. Fig. and dress in 'Indian' style; workmanship very rough; colouring dingy. Face broad and round with straight eyes, fig. narrow-waisted with very broad hips, L. arm outlined by two absolutely straight parallel lines.

Paint (white and pink) all but entirely gone from flesh, halo, and Padmāsana. Colouring otherwise limited to Indian red, yellowish brown, olive-green, and brownish grey, on robes, with black of hair, outlines, and canopy roof. Latter simple form of *Ch. 001 type; halo circular. Blank cartouches for inscr. in upper corners and sprays of Indian red trefoil and quatrefoil flowers with yellow and green leaves filling empty space on R. side. 1' 6" × 1'.

Ch. 0029. Silk painting representing *Thousand-armed Avalokiteśvara* with donors. On two pieces of silk roughly joined across middle and originally backed with paper; torn in places. Deity single-headed with yellow flesh, and bright blue hair and stole. General treatment, emblems, etc., as in series *Ch. 00223, but no tank or attendant divinities. Donors (man and two women) of type *Ch. 00102. Coarse work. Cartouches for inscriptions, blank. 1' 8" × 1' 4".

Ch. 0030. Painted silk banner, dirt-speckled but in fair condition, with four bottom streamers of pinkish-brown silk. Other accessories lost.

Subject: *Scenes from the Life of Buddha*; Chinese in style as Ch. lv. 009, etc., but not elsewhere represented amongst paintings of Collection.

Scene 1. *Writing Competition or Gautama and Devadatta at School.* Shows interior of school. On a dais to L. sits the Master at his desk; on another to R. two scholars with their writing-tablets before them. They wear long coats; their hair done in two tufts on top of their heads, which are otherwise shaven. Scene much worn, and no details distinguishable.

Scene 2. *Wrestling Competition.* This competition frequently represented in Gandhāra art (see Foucher, *L'art du Gandhâra*, i. p. 334, figs. 171. b, 172. a) as one of contests preceding Prince's betrothal; also referred to, though less prominently, in Chinese accounts. Under tree outside palace wrestlers prepare to join, advancing on each other arms up. They are naked except for small loin-cloths, and one (the Prince ?) has a black-tailed cap. Bodies very heavy and middle-aged.

Scene 3. *A Weight-lifting Contest* (?). Exact nature of this contest not evident. On R. Prince (?) advances carrying in R. hand what (from his strained attitude) is evidently a heavy weight. On L. another man, grasping a long wooden beam under his arm, is falling on his back, while far end of beam flies up behind Prince. The weight has apparently been unexpectedly removed from it, though no point of leverage is shown. Falling man naked except for a loin-cloth. Prince wears crimson coat, white breeches, black top-boots and cap; but his R. arm and shoulder are bared for exercise. The weight is ball-shaped object three or four times the size of his head.

Scene 4. *Casting out of Elephant slain by Devadatta.* Prince, clad only in cap and short brown *dhōtī* arranged skirt-fashion, raises carcase at full height of R. arm above his head. His hand supports elephant's back; its feet (tied together) and trunk point to sky; its ears hang down. The obvious strain on Prince's strength and balance well suggest magnitude of task. A spectator (prob. his cousin Nanda) watches with uplifted hands on L. There is no sign of other spectators nor of a city or city-walls. Nanda wears tailed cap, boots, and green-belted coat.

Simplicity of scenes and scarcity of figs. give little scope for colour. What there is is dim, and scarcely relieves general greenish grey of the background, which is sprinkled with small plants. Drawing rough but naturalistic, and attitudes highly expressive. Buildings and furniture are of same type and colour as in Ch. 0039, lv. 009, etc. A blank cartouche, yellow or orange, for inscr., placed at side of each scene, on alternate edges of banner. Painting 2' × 6¾", length with streamers 5' 3". Pl. LXXVI.

Ch. 0031. Remains of silk painting representing *Vaiśravaṇa, Guardian of the North.* Head and shoulders of Lokapāla only preserved and in fair condition, with faded red silk border from top and one side of painting, and part of nymph (much effaced) offering flowers (?) on L. V.'s hands are lost, but he carried the halberd over R. shoulder; its two-spiked head with pennon and streamers preserved complete.

His position almost full-face to spectator, but his face slightly to right. It is large, with frowning eyebrows and strongly-marked features, but not grotesque except for eyes, which are large and round with iris isolated in middle of white. Flesh yellow crudely shaded with red; eyebrows, long moustache, and long narrow beard, grey; rest of hair black, done in top-knot and falling in mass behind shoulders. Latter are covered with small scale-armour in red and yellow, round-edged; doublet cut low on neck. In ears are large stud earrings and on head a solid tiara, with white fillet and streamers at ears.

From each shoulder rises stiffly curving red flame or streamer, almost joining canopy above. In these latter points fig. exactly resembles the Vaiśravaṇa of Ch. 0087, but workmanship is better throughout. Of nymph on L. only head and part of breast remain, with upraised R. hand. She wears pink and white robe and coif-like head-dress of nymph offering flowers to Avalokiteśvara in Ch. 00105. Border preserved 2′ 2½″ (width complete) × 1′ 3″. Largest fr. of painting 9″ × 7½″.

Ch. 0032. Tassel of thick silk twist set in bronze holder. Latter consists of short tube with loose bell-shaped end, like inverted flower-cup, which covers top of tassel and attachment to tube. From upper end of tube issue strands of buff thread, bound round into cord with red and yellow silk and tied in elaborate knot. Silk of tassel, greenish brown. Length 4½″. Pl. CX.

***Ch. 0035. Painted silk banner;** all accessories lost, also both ends of painting; edges much broken; remains in fair condition.

Subject: *Virūpākṣa, Guardian of the West.* Fig. almost intact; a fine representation and typical of the more Chinese Lokapālas. The chief characteristic of these, as distinguished from quasi-Indian type (see Ch. xxvi. a. 006; lv. 005), is the flowing line of the drawing which gives air of freedom and movement to figs. despite their stiff dress. This is attained by skilful treatment of what drapery exists, and by general pose. The latter is always ¾ profile; with head erect, back hollowed, body thrown out to waist, and legs slightly drawn back, giving a sweeping curve to whole fig. like that of Bodhisattvas of type *Ch. 002. The Lokapāla banners evidently belong to same school as these from their resemblance also in mechanical points, such as average size and pattern of rhomboid bands at their lower ends. The main points of dress in which they differ from the 'Indian' type have been enumerated in *General Note*, *Ch. 0010: coat of mail shorter, and in tunic not coat form; breastplate always in form of corslet, girt round body under arms; greaves and arm-guards are always of the whole-leather or plate variety with ornamental circular discs of different colours over calves; and the feet are shod with sandals or rope shoes. The figs. are burly; the faces sometimes bearded and inclined to monster type, sometimes clean-shaved and human; eyes often of glaring demonic type; but where normal they are oblique (Ch. 0040, lv. 0017). Haloes are always a plain disc of colour, and in most cases a characteristic Chinese scroll of clouds rises at its side and spreads overhead. There are no canopies.

Ch. 0035. Virūpākṣa stands ¾ L. on demon, of whom only red hair remains sprouting between feet. All below is lost, including greater part of Lokapāla's feet. Before him he holds a long-hilted sword in scarlet and blue scabbard, jewelled end of which rests apparently on demon's head. His L. hand grasps the hilt, his R. is laid on the jewel at top.

For description of dress, see *General Note*, *Ch. 0010. The scale-armour is in oblong scales both on skirt and body, with a small circle cut out of each scale high on R. edge (cf. above, p. 483, M. I. xxiv. 0040, etc. Pl. L); it is painted white and blue, but very little is visible as the fig. wears a mantle muffling shoulders and knotted under chin. Mantle is dark purple, with copper-green on reverse side. Corslet light blue with crimson breast orns.; tunic rich crimson with blue border; stole blue and copper-green on reverse sides; the pleated bottom of coat of mail copper-green. Leg-covering (white) tied round the leg over greaves, which are painted crimson, blue, and green.

The hands are gnarled; head massive and set low on shoulders; face half human, half beastlike, the lower features lost in mass of reddish brown beard and whisker which sweeps upwards round cheeks, framing face to cheek-bones. Flesh painted brown; mouth, large and firmly shut, bright red. The round lidless eyes, with white balls, green iris, and black pupils, stare steadily to L. with half-savage, half-stupified expression. Tiara much destroyed, but traces remain of white fillet with horn-like streamers curling upwards at ears, of red and purple jewels, and of top-knot of red-brown hair. Halo pale copper-green, and traces of red, white, and blue cloud are seen rising on L.

Colouring much dimmed, but enough remains to show its original richness and effect of whole.

For an inferior replica, coarser in colouring and mutilated, but bearing inscr., see Ch. 0022; for a replica uninscr. Ch. xx. 0011; for fr. of replica Ch. 00117; and for other Lokapālas in the same style, Ch. 0040; xxiii. 001; xxvi. a. 002; xxxiv. 004; lv. 0017, 0018, and lv. 0020.

1′ 5½″ × 6⅞″.

Ch. 0036. Painted silk banner; top and bottom and all accessories lost. Silk split in places but otherwise well preserved, and colours fresh.

Subject: *Mañjuśrī*, on white lion led by Indian attendant. The whole ¾ L. Good example of preservation of Indian tradition in Chinese Buddhist art. For other examples (in Chinese style) see Ch. 0023; xxii. 001, and (without lion) Ch. xxii. 004. M. sits on scarlet lotus supported on gold pedestal on lion's back; R. leg bent across in tailor-fashion, L. pendent with small blue lotus under foot. R. hand on knee in *vara-mudrā*, L. resting on Padmāsana and holding long-stemmed narrow-petalled lotus, prob. intended for blue *utpala*, but coloured pink.

M. is entirely Indian in dress and physical type, as in pose; body feminine in contour and painted a dull pinkish yellow; palms of hands, soles of feet, and inside of ears a pinkish white. Hair light blue, unusually flat on top of head, and straggling on to shoulders in small ringlets. These are tipped black, as is row of small curls on forehead.

Dress consists of short crimson *langōṭī* flowered with blue rosettes, and over them a transparent skirt of purple gauze, draping legs to ankles. Fold of same crosses body from L. shoulder; round neck hangs 'triple cord', pale green spotted with white, as in Nepālese paintings Ch. lvi. 001–0010. Jewellery consists of double-hoop bracelets and anklets, earrings, serpentine armlets with high triangular orn. on outer arm, and double necklace from which hangs row of

blue and green lotus buds. Tiara of solid gold work, three leaves in front mounted with jewels.

Head bent over R. shoulder, and eyes downcast; face round and features small, eyes oblique; eyebrows drawn in arched green lines.

Behind fig. is circular halo, and behind head one of much elongated oval shape, both of variegated rings of green, scarlet, light blue, purple, and black. Above remains of draped and tasselled canopy, waving with lion's advance.

Lion of conventional type strides L. with head turned back and mouth open as if roaring. His mane (a bunch of formal curls) is painted red, blue, green; his eyebrows and whiskers green; his breast, jowl, and backs of legs spotted with red. He wears breast-band, crupper, girth, and saddle-cloth, breast-band hung with fly-tassels and metal orns.

The attendant leads him by red rope tied round his neck, and carries in L. hand goad (broken off). He is painted dark greenish black, with coarse features and mass of bushy black hair, and wears a red and blue *dhōtī* tucked up at knees like trousers, narrow stole and simple jewellery. Yellow cartouche for inscr. to L. of head, blank. $2' 2\frac{5}{8}'' \times 9\frac{3}{4}''$. *Thousand Buddhas*, Pl. XXVII.

Ch. 0037. a–d. Four frs. of paper painting, of which (*a*) evidently separate small picture, and (*b*), (*c*), and (*d*) parts probably of larger one.

(*a*) represents pilgrim or hermit, parallel in all respects to the larger Ch. 00380, so far as preserved; but whole of L. upper corner of picture lost, so that it is not certain whether a Buddha appeared in this case or not. Fig. wears same dress as in 00380, including mushroom hat, here black and tied under chin with pink bands. His R. side and arm lost, but his R. hand appears at level of thigh holding lower end of pole, which rests on his R. shoulder and supports by chain attached to its upper end manuscript bundle at his back. His L. hand holds horizontally across his breast thinner red staff, which may be a cross-piece of pole, or handle of fly-whisk as in Ch. 00380. Mouth open; face wears strained expression, but is not old or emaciated. No staff. Tiger walks on his further side; facing it stands small child (partly destroyed), dressed in greenish brown robe and holding roll of paper in his hands. Rough work; colouring only dull pink, green, grey, and yellow, besides black. $11\frac{3}{4}'' \times 9\frac{1}{4}''$ (when complete).

(*b*) shows feet and lower legs of Lokapāla, seated on some kind of cushioned throne; R. leg bent across from knee, L. pendent but also bent slightly inwards. Both clad in black metal-orn. shoes, greaves, and white draperies tied round each leg below knee as in *Ch. 0035, etc. Only colouring, light red and grey, besides black. $6'' \times 11''$.

(*c*) shows loops of black floating stole, and bent-back head of guitar with curious fan-shaped projection at top (?). $7'' \times 6''$.

(*d*) shows kneeling figs. of two girls, apparently in row of donors. Foremost leans forward with R. hand on ground, L. apparently raised, and with hand turned downward covered by long drooping sleeve; girl behind plays on clappers. Latter seems to wear usual long wide-sleeved mantle, black, lined with red, over white under-dress. Foremost girl wears black narrow-sleeved red-bordered jacket reaching to knees and tied round waist with red sash. Beneath she appears also to have white skirt, but figs. incomplete. Both have black hair done on either side of head in two round masses, from which hang short stiff locks. Figs. graceful, faces small-featured and delicately drawn. Fairly preserved. $5\frac{1}{4}'' \times 6''$.

Ch. 0039. Painted silk banner; all accessories lost, and whole of lower end. Considerably broken and paint smudged.

Subject: *Scenes from Life of Buddha.* Two preserved; prob. showed three when complete. Same series continued in Ch. xxii. 008, xxii. 0035, and xx. 008; these not only show general uniformity of style, but are of same warm brown silk and of same width, with scenes on the same scale. The two complete at bottom, xxii. 0035 and xx. 008, are also finished by decorative band of same pattern, red and green lozenges and triangles on brown ground of silk.

Scenes simple in design, with little detail, and divided from each other by miniature range of hills, blue, green, and vermilion. Drawing rude but vigorous; colour limited in range and of plain tones, red, blue, green, copper-green, yellow, dark purple, and slate, besides black and white; the white everywhere much worn. Features of human figs., buildings, dress, and other accessories entirely Chinese.

Buildings long and low, with verandahs raised a few feet above ground, and long sloping roofs with up-curved eaves. Walls always white, roofs blue, with copper-green framework; pillars and open-work frieze of verandah red; tiled ground-wall and steps of verandah slate-blue. The women's dress a long robe or skirt, and over it a jacket with wide sleeves, tied in (or simply tucked below skirt) under arms; where their feet are visible they wear shoes with upturned ends. Their hair is done in a heavy black drooping top-knot at corner of head, held in front by a comb or fillet, and decorated with white flowers or pins and green leaves. Their faces and hands painted solid white with red patches on cheek and brow; the men's dull pink all over; Buddha's flesh yellow (mostly lost). The men's dress descr. in Ch. xx. 008. Figs. of all short and squat. General effect crude but bold, and most full of character in the more active scenes.

Scene 1. *Descent of Buddha.* To R. upon a verandah lies Māyā asleep on a couch. She is wrapped in a red robe and lies on R. side. Palace buildings appear behind. In centre, above her head, on cloud indicating a vision, appears a red disc, in which stands elephant with infant Buddha on his back (much effaced). In L. bottom corner stands woman attendant, holding fan.

Scene 2. *Birth of Buddha in Lumbinī Garden.* On L. tree represented as weeping willow, red-stemmed. Under it kneels woman attendant holding up white cloth for reception of infant. In centre stands Māyā, R. hand raised, grasping bough; attendant behind holds her L. hand. The infant springs head down and arms outstretched from under her R. arm, under but not through the sleeve. On R. edge two more women, and in background two large pink lotuses with

slate-coloured leaves, growing on thick red stalks. Women's dresses red, blue, and green. Māyā's hair is done in a mass on her neck, and she is distinguished by a large gold orn., somewhat resembling pair of folded butterfly wings, which hangs over back of her head. Kneeling attendant has an orn. of something of the same kind, but apparently single; and she therefore prob. represents Prajāpatī. Top scene is much effaced and faces in lower smudged. At top of painting remains of painted valance, red with a pattern of green and slate-coloured rosettes and a vandyked border.

For other representations of Buddha's Descent to earth see Ch. 0019; lv. 009; and of his Birth, Ch. lv. 0010. 1′ 3″ × 7¼″.

Ch. 0040. Painted silk banner; both ends of painting broken and all accessories lost, but remainder almost intact and surface exceptionally well preserved.

Subject: *Virūpākṣa, Guardian of the West.* A very fine example of the 'Chinese' Lokapāla; see *Ch. 0035. Stands ¾ L. on back and knee of demon, who crouches on hands and feet. R. hand at hip grasps hilt of naked sword, which passes across body to L. shoulder; blade supported at breast by open L. hand.

For detailed description of dress, see *General Note*, *Ch. 0010; but V. here wears no mantle or breeches, the knees being bare and head and neck covered by helmet and gorget fitting close round face. Helmet is of scale-armour strengthened with plain leather bands and with a wide leather brim curling up and out at ear-level all round head. From beneath this comes gorget made also of scale-armour (?), grey, coming well down on to shoulders and tied close under chin. On top is lotus spike, prob. supporting jewel (now lost), and in front a recurved gold stem ending in orange flame or plume.

Folded girdle round breast is replaced by stiff belt of ornamented leather (?). Centre-piece of lower leather belt is in form of beast's mask, with blue face, round white eyes with scarlet rims, white horns and wide purple-spotted mouth and jaws showing double row of teeth, between which passes the belt. The sandals are simple, with wide double soles and plain toe and heel straps drawn tight by a strap round ankle.

Colouring is of gay light hues, exceedingly well preserved: scale-armour yellow and red; skirt rich red with ultramarine border; ground of corslet, greaves, and arm-guards, and pleated edge of coat of mail, a light copper-green; stole copper-green and ultramarine; appliqué discs and jewels on corslet, arm-guards, and greaves, purple, orange, and blue. Inner side of skirt and of flying sleeves at elbows is blackish white, bordered with orange; the long girdle blackish white; borders of coat of mail red or black, and hip-belt black.

Face quiet and undistorted; round in shape and clean-shaven, with small watchful eyes slightly slanting, short protruding nose, and firm mouth and chin. Eyeballs painted grey; eyebrows black, drawn in numerous fine cross-lines over the ground arched line. No other hair visible. Hands are short and strong, and, like face, knees, and feet, are painted a warm brownish flesh-colour shaded skilfully with red. Behind large circular halo of pale blue. From R. upper corner purple cloud curls down towards L.

The demon is shaded blue, and has dog-like face, mis-shapen hands, and flame-like hair. He crouches on hands, R. knee, and L. foot.

Work throughout well drawn and finished; fig. dignified and vigorous.

2′ 8″ × 10½″. Pl. LXXXV (*Thousand Buddhas*, Pl. XXVII).

***Ch. 0051. Large silk painting** representing *Paradise of Amitābha* (*or Śākyamuni*), with side-scenes showing legend of Ajātaśatru and meditations of Queen Vaidehī on Sukhāvatī. Incomplete top and bottom, but remainder intact and in good condition.

General note. One of large class representing same subject, and in composition and style of work generally resembling Paradise of Bhaiṣajyaguru, *Ch. lii. 003; but workmanship, though evidently of same school and following same convention, is usually less highly refined and scene less elaborate. For other examples, see Ch. 00104, 00216, v. 001; xxxiii. 003; liii. 003 (linen); lv. 0033, 0047; lvi. 0018; lviii. 0011. This series has been identified by Mr. K. Yabuki as illustrating the *Amitāyurdhyāna-sūtra*, tr. into Chinese in A.D. 424 and much commented on by Chinese Buddhist writers. The main picture represents *Sukhāvatī* itself, the side-scenes on R. legend contained in Pt. I of Sūtra, those on L. the meditations of Queen Vaidehi described in Pt. II of the same. See above, pp. 885 sq.

So far as figures are concerned, chief difference from Paradise of Bhaiṣajyaguru lies in absence of Kings, warriors, or demons from attendant host. This is composed entirely of Bodhisattvas (seated or kneeling on terrace with hands in adoration or mystic pose or holding lotus buds); nymphs (a pair usually kneeling by the altar and offering flowers); dancer and musicians; and two subsidiary Buddhas. The latter with their attendants always seated in bottom corners, in place of Twelve Kings; and the sacred birds—crane, peacock, Garuḍa, phoenix, and duck—are usually grouped on raft over lake in centre foreground. There are sometimes also a varying number of priestly disciples ranged in background behind presiding Buddha.

Bodhisattvas usually in dress, ornaments, and coiffure of *Ch. 002 type, and except where specially noted are seated cross-legged. But Indian tradition often much more strictly preserved in attitude, colouring, and dress of two chief Bodhisattvas in central triad. Musicians and nymphs usually like minor Bodhisattvas, but without stoles; the musicians occasionally of masculine type, in modified form of Bodhisattva dress.

Side-scenes are always in purely Chinese secular style, like that of banners showing Śākyamuni's life (see Ch. 0039; lv. 009, etc.). Scenes representing movement usually drawn with much life and vigour. There is little detail, and background often uniform for whole series of scenes: open grassy ground or verandahed wall or courtyard with pavilion to R. or L.

The men's dress consists: (for dignitaries) of long under-robe with long and wide-sleeved over-jacket and stiff black

head-dress with flat top and backward-pointing wings or horns; for ordinary persons, of top-boots, long belted coat, and peaked and tailed black cap; for women, of trailing skirt and wide-sleeved jacket usually tucked into skirt below arms. Still longer narrow sleeves covering hands sometimes appear under wide sleeves of jacket in the case both of men and women, and over jacket occasionally a sleeveless tunic or deep belt of contrasting colour, covering body from armpits to hips. See *Ch. 0051. *iii* and *iv*; xxxiii. 003. *iv, v*; lv. 0033. *ii, iii*.

The women's coiffure varies, but consists sometimes of plain top-knot (Ch. xxxiii. 003; lvi. 0034), and sometimes of roll on neck with flat top-knot or lotus-flower orn. on top of head (Ch. 00216; v. 001). More often, however, hair gathered on top of head by gold orn., and thence done in two high stiff loops which curve out behind back of head and are brought in again at neck (*Ch. 0051; lv. 0033; lv. 0047 ?). A top-knot sometimes combined with this coiffure, which seems confined chiefly to side-scenes of Paradise pictures, and to flower-offering nymph of Ch. 0018, and of *Ch. lii. 003; and the wife in banner Ch. 00114. The wide-flapped black hats of men donors in *Ch. 00102; lviii. 003 (A. D. 963) and kindred pictures, presumably also of tenth century, and the elaborate head orns. and flowered black jackets of women donors in same, are never found in these side-scenes (for an explanation, cf. above, pp. 850 sq.). As in case of the donors and of the scenes from Gautama's Life in banners, the men's flesh is painted a uniform flesh-pink throughout and the women's white with red cheeks.

Ch. 0051. The presiding Buddha has R. hand in *vitarka-mudrā*, L. hand lying in lap. Two chief Bodhisattvas sit in 'Enchanter's Pose', with one leg pendent and one bent; the one on L. with R. hand before breast, thumb, second and third fingers joined, and L. hand erect on knee with three fingers extended as if in blessing; the one on R. has R. hand in *vitarka-mudrā*, L. hand on knee in *bhūmisparśa-mudrā*. Between each of them and the Buddha sits a youthful disciple (?), in under-robe, mantle, and necklace, with black hair short over his head but falling in Bodhisattva-like locks behind his shoulders. The robes and orns. of all Bodhisattvas are of 'Indian' type descr. in Ch. lv. 0014, with narrow scarves only across breast and narrow stoles leaving most of body and arms bare.

The musicians' dress the same, but their features are here of masculine type, their expression realistic, and their hair like that of disciples on either side of Buddha. Dancer completely attired in crimson robe reaching from elbows to ankles, with copper-green girdle and elbow frills, orange under-sleeves, and bronze-bound orange collar. The musicians play on clappers, pipe, flute, and reed-organ (or *wu*, teapot-shape) all of same type as in *Ch. lii. 003 (see also Miss Schlesinger's note, App. *H*). Of the Buddhas in bottom corners only head and shoulders remain, and of lake only small part, in which scarlet and orange lotuses, but no infants.

Workmanship good, and colour in good condition. It consists chiefly of usual crimson and dull green, with some blue on altar and stoles and robes of side-scenes, and is enlivened by plentiful copper-green on trees, haloes, and ornamental vesicas and Padmāsanas of central trio; but the latter much worn. Floor of main terrace dull brown; no black except in hair of minor figs. (In this case hair of central triad light blue, painted over light green which now alone remains; their eyes oblique with thickly painted whites; their flesh yellow shaded with red. Flesh of other figs. white shaded with pink.)

Side-scenes (cf. inscribed series in Ch. 00216) represent on R. legend of Ajātaśatru, on L. meditations of Queen Vaidehī, and run as follows:

On R., (i) Buddha appearing to Vaidehī as she is walking;

(ii) Vaidehī throwing herself down before the Buddha, who again appears seated on Padmāsana; garlanded tree in background;

(iii) Ajātaśatru pursuing his mother with sword; Candraprabha, minister, and Jīva, physician, in foreground, carrying rolls of paper, and ready to intervene;

(iv) Vaidehī visiting Bimbisāra in prison, and bringing him a lotus (representing prob. garland from which, according to the legend, she produced him drink);

(v) Ajātaśatru (?) on horseback, accompanied by a foot-servant with club, meets a yellow-coated man who bows profoundly to him. Cf. Ch. liii. 003. *iv*; lv. 0033. *vi*; lv. 0047. *vii*; lvi. 0034. *vii*;

(vi) Mostly destroyed; but shows part of pavilion with Ajātaśatru seated inside.

On L., Vaidehī meditating on Sukhāvatī. As in whole series of these scenes, she is kneeling on mat with hands in adoration before object representing her thoughts, and is placed alternately on R. or L. to break monotony of scenes. Those preserved here show: (vii) perhaps a canopy; (viii) water (as ice?)—a square of white within a brown border; (ix) the Jewel-tree, a clump of conventional star-leaved red-flowering trees rising from a tank; (x) the Mansions of Sukhāvatī, a small hexagonal pagoda on pedestal; (xi) the Ground of Sukhāvatī (?), a square of copper-green, bordered and divided into four by bands of dark brown. In each subdivision an irregular black cross-mark as in Ch. lv. 0033. *xi*, etc.; (xii) the Flowery Throne, a stepped throne or pedestal, with lotus base, and flaming jewel on top; (xiii), (xiv) the Buddha Amitābha (or Amitāyus), seated in meditation on Padmāsana; (xv) and (xvi) the Bodhisattvas, presumably Avalokiteśvara and Mahāsthāma, seated on Padmāsanas. 3′ 3″ × 3′ 8″.

Ch. 0052. Linen painting showing standing fig. of *Avalokiteśvara* (Kuan-yin) approaching life-size. Painting on strip of coarse natural-coloured linen, with border and suspension loops of blue linen.

In size, shape, and subject typical of large number of linen paintings; others being Ch. 00125–00130; iii. 0011; xxi. 005; xxi. 007–8; xxxiv. 005; xlvi. 0011. a, and lv. 0035. All represent single fig. of Avalok., almost life-size, standing Padmāsana facing spectator, with emblems in hands, and circular halo and canopy above. Most of figs. follow Indian tradition in physical type and dress as well as in stiffness of pose; but one or two (Ch. 00128, lv. 0035) are in 'Chinese Buddhist' style of *Ch. 002, etc. Several have Chinese donors at bottom. A few of figs. are six-armed and eleven-headed,

but the majority are normal in these respects. Workmanship is much on a level throughout, and is in coarse style partly necessitated by nature of material; but most are on a higher level than *Ch. 0052.

Ch. 0052. A. stands facing spectator; R. hand raised holding lotus spray, L. by side carrying flask with porcelain body and metal neck and foot. Dhyāni-buddha on front of tiara. Dress in 'Indian' Bodhisattva style as in *Ch. 0088, with short tight over-skirt under girdle, ending in frill above knees. Long body with slender waist; short legs. Flesh shaded with salmon-pink; hair black; jewellery yellow; dress crimson, dull green, pink, and indigo. Blank yellow cartouche for inscr. to R. of head.

5′ 7″ (with loops 5′ 10″) × 2′ 1″. Pl. LXXXIX.

Ch. 0054. Paper painting representing *Bodhisattva*, prob. *Avalokiteśvara.* Bodhisattva is seated ¾ to L. on Chinese sitting platform with legs partially unlocked; R. hand raised and held outwards, palm up and little finger extended; L. hand held before breast, palm inwards and fingers half open. Dress, coiffure, and accessories as in Bodhisattvas of type *Ch. 002. In front, on cloud, stands small Bodhisattva, clasping neck of tall stoppered vase, mottled blue and white; on smaller cloud below A.'s canopy are three kneeling infants playing on flute, mouth-organ (teapot-shaped), and clappers. Behind A. along R. edge of painting are ranged attendants, standing in pairs: below two Bodhisattvas, above two monks, above again two Lokapālas (one holding club), and at top demon with trident. In spaces between legs of A.'s platform appear pairs of lion heads.

The lower part of picture shows (probably) the donor, Chinese high dignitary walking L. with hands in adoration, attended by two men holding crossed fans over his head and by number of other personages. Majority of these in civilian dress like himself—trailing white under-robe, ¾ length jacket with wide sleeves, and stiff black head-dress of various formal patterns (for the latter see the Infernal Judges in *Ch. 0021).

Chief fig.'s jacket is black, and orn. with symbols in yellow; on R. and L. shoulders resp., discs of moon and sun on clouds, former containing tree, latter bird; below each a rampant dragon, and below again, on L. a Svastika; on R. a symbol unidentified. Three of the officials carry long swords before them, pointed downwards; two (one, a mere boy without head-dress, walking beside central fig. and perhaps his son), rolls of paper; one carries nothing and muffles his hands in his sleeves. Two in somewhat different costume—shirts of mail under shorter jackets, and long trousers swathed round their legs—walk a little apart, one carrying a fan. The men holding the crossed fans wear also white trousers and short jackets, while one has in addition deep belt or short over-skirt fitting tightly round hips.

The donor was evidently a person of unusual importance, for nowhere else is he represented with such a *cortège* of his own, and paying so little outward attention to deity inspiring picture. Attitude of his hands sole hint of his position as worshipper.

Good condition. 2′ 5″ × 1′. *Thousand Buddhas*, Pl. XXIV.

Ch. 0055. Painted silk banner; all accessories lost, and background discoloured in places; condition otherwise good.

Subject: *Bodhisattva* (Avalokiteśvara?) with purple lotus bud, stands ¾ L. on scarlet lotus, both hands at breast holding stem of lotus which rises before face. Fig., dress, accessories, and workmanship of type *Ch. 002; brown irises to eyes.

Colouring very quiet, consisting of greenish brown, olive-green, some red, and touches of purple in lotus bud, jewels, and inner side of robe. Latter left the natural colour of silk; folds faintly shaded with pink and outlined with solid red. Above canopy remain bells hanging from draped valance. 2′ 2″ × 7″.

Ch. 0056. a–b. Frs. of two miniature paper banners; upper part of body and head-piece, with signs of side-streamers. Painted on obv. only, with seated Buddha in triangle of head-piece, and rosette orn. on border. Body painted in sq. panels, divided by their diagonals into four triangles, orange, grey, crimson, and olive, with boss orn. at centre. Gr. length 5″, width 1½″.

Ch. 0057. Fr. of silk painting, showing a *Buddha* seated in meditation on lotus; feet exposed, thumbs touching, mantle covering both shoulders and arms. Circular halo and vesica. Light colouring of red, yellow, and olive-green; hair black. All edges ragged. *C.* 1′ × 8″.

Ch. 0058. Triangular head-piece with tapestry border from painted silk banner. Head-piece composed of fine silk gauze, painted on deep blue ground with orange-red lotuses with blue sepals and green black-centred leaves. Fine colours and delicate work in Chinese style, each petal or leaf being doubly outlined with fine lines of white and red or yellow and red, and shaded inwards to dark centre; but much broken. Backed with soft brown silk and retaining one streamer of the same.

Triangle bordered on each side with strips of very fine silk tapestry, hand-made (same as on Ch. lv. 0034, Pl. CVI). These are complete in width, and woven with elliptical 'spot' pattern, so arranged that a complete spot, falling on centre line of material and occupying whole width, alternates above and below with pair of half-spots, which lie along the respective edges and touch horizontally. Ground brilliant orange-red. Each complete spot shows in middle a duckling, ¾ L. or R. in alternate spots, standing with legs striding on plain oblong ground surrounded by eight spiral scrolls.

Scrolls in pairs like volutes, one pair on each side of ground. From middle of each springs a leaf like a vine-leaf, and these form four points of spot above, below, and on each side, alternating with buds on curving stems which spring from between each pair of scrolls. Design of half-spots slightly varies in having a chevron instead of bird, and dark blue triangular flowers in place of vine-leaves.

Colouring of complete spots as follows: scrolls, composed of parallel bands following curve, (*a*) brown (inner curve), red, white, green, alternating with (*b*) brown, green, yellow, red; leaves true green serrated with yellow-green and with gold-paper strip in centre; buds straight parallel bands of

brown, blue, white, blue and brown, outlined with gold-paper; stems brown. Centre with duck varies, four schemes being here preserved: (*a*) white ground and yellow duck with brown beak and legs and white eye; (*b*) brown ground and white duck, with scarlet beak, legs, and eye; (*c*) yellow ground and duck all white, with brown eye; (*d*) white ground and blue duck, with scarlet beak, legs, and eye. The idea seems to be that of duck-pond surrounded by plants, and recalls motifs used on Egyptian dishes and Assyrian landscape sculpture (cf. e.g. blue-glazed porcelain bowl No. 4790 in Brit. Mus. Catalogue).

Colouring of half-spots is similar; but flowers replacing leaves are blue outlined with white, and buds have green and yellow bands instead of blue and white. Triangles forming chevron variously coloured blue and white, brown and white, yellow, white, and green. Weaving done by hand with needle as shuttle, and in technique resembles that of Ancient Peru and Coptic Egypt. Open divisions where vertical junction of colours occurs do not appear to have been joined afterwards by hand, as usual practice now. The gold is gold-leaf laid on tough paper and cut into strips of required narrowness—a method still used in Japan.

Well preserved. Same tapestry found on Ch. lv. 0034 (Pl. CVI); for others of like kind, see above, p. 905. Base of triangle 9¼", h. 7½".

Ch. 0059. Fr. of large silk painting evidently representing *Buddha (Śākyamuni) in grotto of Vulture Peak*, with Jātaka (?) scenes at sides. Part only of L. half, much broken and all edges incomplete; but drawing well preserved and colour exceptionally fresh.

On R. edge remains R. shoulder and arm of standing Buddha and trace of side; arm hanging stiffly downwards at full length, and slightly away from body, with fingers also stretched straight down; flesh deep yellow with vermilion shading. Pose identical with that of Śākyamuni statue in Ch. xxii. 0023, fig. xiii, and of central Buddha in embroidery picture Ch. 00260; cf. above, p. 879. Behind is elongated oval vesica with border of cobalt blue orn. with conventional flower spots in red and green; circular halo of light green and vermilion; and flame and smoke border to both, in vermilion and dark blue. Behind and above are piled rocks (dark blue and brown) with vulture perched on top and flight of wild geese and ducks (white and black) above. The vulture (white and vermilion) suggests cormorant in build, and has erect feathery tail like phoenix.

Beside Śākyamuni and turning towards him, stands a disciple, prob. *Śāriputra*, complete except for L. foot, and with unconventional type of features. Head long and high at back with well-defined 'corners' there and over forehead, oblique eyes, large nose, and long pointed chin; flesh painted pink with broad vermilion outlines; pupils of eyes, line of eyelash, and bushy eyebrows alone in black; shaven crown, white; behind head, circular halo of brilliant vermilion. Dress consists of under-robe of vermilion and light green; black shoes upturned at toes; and large mantle of mottled dark green, blue, and red, speckled with white and bordered with black. Latter covers both shoulders and envelops arms, which are bent at elbows, R. hand being laid in palm of L. before breast.

The Jātaka scenes (unidentified) are as follows: (i) At top, statue of Buddha in background with R. arm stretched down as in central fig., L. arm lost; to L. a white and red building (temple ?), outside which stands a shaven priest, in vermilion under-robe and brown mantle, pointing out statue with raised arm to passers-by. These consist of a man in brown coat and top-boots riding to L. on blue mule; and a white elephant with load of yellow objects under a vermilion cloth (rider or driver invisible), proceeding in same direction.

In foreground hilly ground, on which stand two men with black beards and shocks of black hair. These are painted only so far as their figs. appear above the profile of the hill, though the remainder of their persons is drawn in outline below. The foremost, who is painted down to knees, stands facing oncomer on mule, and bending slightly as in sitting posture with his arms (?) raised and held out. The lack of detail, however, is so great that exact position of arms uncertain; no trace of forearms or hands appears in drawing. Of fig. behind him only bust (facing spectator) appears above the hill, and it is obviously armless. His body and legs are drawn in standing posture below. From carelessness shown in other details, e. g., L. arm of rider in ii, and junction of wrong scaffolding poles in iii, the peculiarity in arms is quite probably without significance.

(ii) Upper half lost except for fr. of cloud, and of red and blue (unidentifiable) object in foreground. Below on L., a green slope on which is an erect oblong painted brown, with small square of vermilion in middle. On ground to R. of it, in irregular line, stand four objects of similar brown, of elongated quasi-triangular or leaf-shape; the long sides slightly curved, and a square drawn in outline on inner side of base.

On lower ground, behind this, appear: above, two semi-naked figs., incomplete, one sitting with arms and legs stretched out, the other standing, but upper half lost; below them, a colossal pair of hands (orig. white) rising from ground and enclosing between them a human head (red); to R. of this, a row of four conical beehive-like objects, possibly straw-covered huts or tents, striped horizontally white, yellow, and blue, with vermilion tuft on top, and a large vermilion pennon rising from the one nearest hands (or from ground beside it).

Behind these, a man on dark grey horse riding towards miraculous hands with R. arm raised, weapon (?) in R. hand, uncertain owing to break. He wears vermilion coat, black top-boots, and white shoulder-cape striped horizontally yellow and blue; head missing; L. arm carelessly painted over with vermilion of coat (?). Behind him ride two attendants, mount of one only (a white horse) being visible. On cartouche attached to this scene is scrawled, lengthways, four-footed beast at gallop.

(iii) Above, the God of Thunder on cloud within ring of drums; in centre, before background of rocks, large statue of Buddha within scaffolding of vermilion poles, R. arm downstretched as in central fig., L. hand gathering up

drapery in 'ear' at breast. On either side of scaffolding is perched a man, with hands thrust forward busy at statue's head, and steadying himself with one foot at its shoulder; in foreground, L., a building in Chinese style and a man running out (?) from back of it with hands held up, endeavouring to attract attention of workers on statue or giving them directions; in foreground, R., a small demonic (?) fig. in white loin-cloth and blue cap, with arms and legs outspread like the Thunder-God's and of same stunted build.

(iv) Detached fragment showing Thunder-God in fury, within ring of drums on black cloud.

Drawing throughout vigorous and, as in head of disciple, full of character. Colouring unusually strong in tone owing to prevalence of vermilion and deep blue. Comparison with embroidery picture Ch. 00260, where same subject treated without Jātaka, suggests early date; cf. above, pp. 878 sqq. For workmanship of Jātaka scenes, see banner series Ch. 0039. 3′ 1⅜″ × 1′ 6″. *Thousand Buddhas*, Pl. XIII.

Ch. 0060. Painted linen banner, with Chin. inscr.; retaining head-piece border of bright pink linen; streamers lost; painting on whitish linen, clean and fresh.

Subject: *Kṣitigarbha*, on authority of inscr. which consists of salutation to Ti-tsang. Fig., dress, pose, etc., as in Avalokiteśvara linen banners descr. under *Ch. i. 0016; q.v. for general descr. and list of similar figs. No distinctive attribute of K. Colouring red, olive-green, and yellow; fair workmanship. 2′ 7″ (with head-piece) × 8½″.

Ch. 0061. Painted linen banner, with Chin. inscr. (all but effaced); all accessories lost. Shows standing fig. of *Bodhisattva*, ¾ R., with hands in adoration. Prob. Avalokiteśvara, as in Ch. 00136. Fig. of 'Chinese Buddhist' type as *Ch. 002; good workmanship, but paint and drawing much gone. Colour (remains) olive-green, crimson, copper-green. 2′ 5½″ × 6¾″.

Ch. 0061. a. Fr. of figured silk woven in firm satin twill with fine pink warp (stiffened) and broad untwisted weft, as in Ch. 009, but finer. Shows part of design of repeating circular medallions (in rows), with alternate rows of four-armed spots placed in spandrels. Of circles only adjacent arcs of two in same row remain, and fr. of another in next row. Their diam. when complete was prob. *c.* 6″; rows apparently about ¾″ apart at nearest points, while circles in individual rows all but touch. Frs. preserved show light green field (?) with border made of inner band of bright yellow, then red, and then outer line of white. Four-armed spots consist of central rosette with four trefoil petals in red, pink, and white (from centre out), and four outer trefoil leaves in red, light green, and yellow. Ground of whole indigo.

General arrangement of pattern shows 'Sassanian' influence; see above, p. 909. Fine colour and excellently woven; condition perfect. 9″ × (gr. width) 2″.

Ch. 0062. a–b. Two frs. of figured silk, orig. sewn together as point of streamer. Both woven in satin twill with fine warp and broad untwisted weft; (*b*) of looser texture.

(*a*) Shows part (prob.) of circular spot with four-armed floral centre into angles of which fly four birds. Outer wreath composed of rosettes with alternately large pointed trefoil and small round leaves. Ground indigo; rosettes and leaves red, white, and green; birds bright yellow with outlines and markings in red.

(*b*) Shows part only of larger design containing long narrow leaves, and beak and head of bird. Pattern in pale blue, yellowish green, red, pink, and white on indigo ground. Colours of both much faded. 4¾″ × 1¾″.

Ch. 0063. Fr. of figured silk, badly worn, woven in kind of satin twill with double warp and weft. Pattern was Sassanian, but part only of green curved border orn. with elliptical white discs, and unintelligible traces of field and spandrel design, remain. Ground old-rose, pattern green, white, and (in spandrel orn.) yellow. Warp pink yarn, twisted; weft flat and untwisted. See above, p. 909. *C.* 3″ × 2″.

Ch. 0064. Fr. of figured silk, from selvedge, woven with fine stiffened warp and very thick lustrous untwisted weft in kind of satin twill. Ground scarlet. Pattern preserved shows light green tendrils edged with bright yellow, running out from flower centre of light blue and white, and similar tendril coming to meet it from other side. Below in middle edge of circular (?) floral design in green, yellow, white, and pink. Prob. a repeating circle and lozenge design on lines of Ch. 0076 (see above, p. 906), etc. Solid fabric, surface rather worn, colours fresh. 6″ × ¾″.

Ch. 0065. Strip of silk damask, white, inwoven with occasional repeating spot in apricot-coloured silk, and forming thus a true brocade. Damask woven of round rather fine lustreless warp, sized, and soft glossy untwisted weft. Design floral repeating pattern, covering fabric generally except where apricot spots occur; both ground and design woven in marked twill running in same direction, warp thread predominating in ground and weft in design. The occasional apricot spots woven of soft untwisted silk, introduced only to form spot and cut short behind; beneath them damask woven in plain twill, the floral pattern disappearing. Spots circular (not completely preserved), repeat at intervals of 4½″, and are like leaf spots of Ch. 00228. Condition good. For other true brocades see Ch. 00170, 00228, 00229, 00364, and figured silk *3* of patchwork Ch. lv. 0028. 1′5″ × ⅝″.

Ch. 0066. Fr. of silk damask, pale grey, thin, discoloured. Ground woven in small twill, pattern in large twill running in same direction. Design apparently somewhat conventionalized floral scroll. 3½″ × 2″.

Ch. 0067. Silk painting representing *Amitābha between Bodhisattvas.* Made of one breadth of silk (1′ 10″); somewhat broken and discoloured, and incomplete at top and bottom. Amitābha stands facing spectator with Avalokiteśvara on his R. and Mahāsthāma on his L. The latter also standing, their heads turned to the Buddha; the three with their haloes and canopies compose entire picture.

Amitābha wears usual olive-green under-robe (covering R. shoulder and arm) and crimson mantle lined with blue. His

R. hand is in *vitarka-mudrā*; L. before breast, palm uppermost, thumb, second and third fingers joined. His hair is black; his flesh a coarse yellow shaded with red; eyebrows and small moustache and imperial, green over black; flesh outlines red, but strengthened with black at face and neck. Eyes slightly oblique, with downcast lids giving narrow effect, but a particularly large eye-socket is indicated by semi-circular lines round inner angle. Mahāsthāma has both hands in *vitarka-mudrā*, while Avalokiteśvara has L. hand in *vitarka-mudrā* and carries flask in pendent R. hand.

Their hair is black; their flesh seems to have been white or pink, but colour entirely gone; their figs., dress, and jewellery are of the 'Indian' variety as in Ch. lv. 0014. Jewellery painted dark crimson, draperies entirely salmon-red or dark olive. Haloes of all three circular, painted in variegated rings of grey, crimson, or green; canopies of usual tasselled and jewelled kind as in *Ch. 001, etc.

Work rough, and colouring dingy, even apart from its discoloration. 2′ 4½″ × 1′ 10″.

Ch. 0068. Fr. of large silk painting representing *Paradise of Amitābha or Śākyamuni*, of same type as *Ch. 0051, etc. L. side only of central Buddha with L. hand in *vitarka-mudrā*, end of altar, and parts of four attendants preserved. Three of latter are Bodhisattvas, fourth a male disciple without tiara or top-knot; all correspond to similar figs. in *Ch. 0051. Part of Paradise buildings, and of palm (?) and willow (?) trees remain above. Colouring chiefly crimson and dull green, with orange, dark pink, and pale blue on haloes and vesica; considerably faded. 1′ 10″ × 9″.

Ch. 0069. L. half of silk painting representing, when complete, *Vaiśravaṇa* and two attendants. L. side preserved with fig. of one attendant intact and upper two-thirds of Vaiśravaṇa. Border lost, but remains of painting in fair condition though cracked.

Both figs. are standing—Vaiśravaṇa facing spectator, with R. hand at shoulder grasping staff of halberd with two-spiked head and red pennon. Dress that of Lokapālas of banners (see *Ch. 0010, *General Note*) and especially resembling that of Ch. lv. 005, but armour scales not marked. Flaps over hips are of tiger-skin; and doublet ends on upper arm in mask of horned monster, through whose open mouth the arm passes. Small sword hangs slanting across legs. Face not grotesque, except for large irregularly shaped eyes, and eyebrows conventionally frowning.

Attendant carries mongoose by neck with R. hand, and flaming jewel with L. (This is the only painting of Vaiśravaṇa in Collection in which the mongoose is found.) His body and limbs bare except for short red *dhōtī* tied round hips with girdle and falling loosely about knees. His head and shoulders covered by tiger-skin, open jaws of which frame his forehead, while the fore-legs are knotted under his chin and the tail appears about his feet. He stands on heaped rolls of coins—an attribute of Vaiśravaṇa: Kubera as God of Wealth. 2′ 5″ × (incomplete) 1′.

Ch. 0070. a–q. Seventeen wooden weighting-boards for banners, one retaining streamer. Twelve painted with various kinds of rosettes, or lotus-flower and leaf design in black, dark green, dark red, and orange; two painted with kind of enclosed palmette design; two have lower half carved in relief to represent outspread lotus with double row of upstanding petals and single row of down-turned petals. These painted in same colours as above, with stamens in yellow upon uncarved upper half. One of plain wood. Most of boards show method of attaching streamers, the ends of which are turned over bamboo slip and gummed into narrow groove along board's upper edge. Average length 7½″ to 8½″ (lower edge) × 1½″; gr. board 10½″ to 11⅞″ (lower edge) × 1⅞″.

Ch. 0071. Remains of painted silk banner, with Chin. inscr., much broken but colour exceptionally fresh; all accessories lost.

Subject: *Scenes from Life of Buddha*; Chinese in style, parts of three preserved. Inscr., on continuous cartouche down L. side, almost entirely broken away.

Scene 1. *Farewell or Departure of Chandaka* (?). Only fig. remaining that of Prince, seated on R., dress and coiffure as in scenes (1) and (2) of Ch. lxi. 002. This and look of distress suggest above identification.

Scene 2. *Pursuit of Śuddhodhana's messengers*; replica of scene (3) of Ch. lxi. 002, but inferior in execution.

Scene 3. *The First Sermon* (?). Identification uncertain. Śākyamuni in Buddha robes, with halo and vesica and gilded flesh, is seated on lotus upon chased and gilded throne. Over him a draped canopy hanging on group of red-flowering star-leaved trees, found in same position in Paradise pictures. Behind throne stand three brown-robed monks with shaven heads. In front kneel the audience, three men (?) with high top-knots and gay parti-coloured jackets and long under-robes of crimson, green, blue, brown, and white. They kneel listening intently with their faces raised. [Buddha's *L.* hand is here raised, and his *L.* shoulder covered by the under-robe, through a mistake by the artist as to which was the right side of the banner or tracing. The inscription and the most finished painting are here on wrong side, if Indian tradition as to attitude is observed.]

Below a disjointed fr. showing group of men in belted coats and tailed caps, standing; but their connexion with the other scenes cannot be determined.

Drawing inferior to that of Ch. lxi. 002; colouring gay, ornate, and carefully applied in 'illuminating' style; cf. Ch. 00216, etc.

For other representations of Departure of Chandaka, and Pursuit of Śuddhodhana's Messengers, see references under Ch. lxi. 002; for the First Sermon, perhaps scene (2) of Ch. xxvii. 001 and (2) of Ch. xlvi. 004, cf. also above, p. 859.

Gr. fr. *c.* 1′ 1″ × 6¾″. *Thousand Buddhas*, Pl. XII.

Ch. 0072. Upper end of banner, made of thin buff silk, unpainted, and retaining triangular head-piece. The latter of fine buff silk damask, woven in small lozenge pattern and bound with plain buff silk. On it is painted Buddha seated in meditation on red lotus, three-lobed halo behind. Simple style.

Length of whole 10½″, width of banner 6½″.

Ch. 0073. Frs. of painted silk banner, showing dark red lotus and lower part of standing fig. draped in striped skirt of dark grey and red, with pattern of four-petalled flowers, red and grey respectively, on the alternate stripes. Evidently a *Bodhisattva* of type *Ch. xxvi. a. 007. 7″ × 7″.

Ch. 0074. Silk painting with Tib. inscr. representing *Avalokiteśvara* (?) with attendants and donors. Broken top and bottom; much faded; rent across middle sewn together in antiquity; frs. of silk border preserved at sides.

Picture probably shows a simple form of *Sukhāvatī*, Avalok. taking place of Buddha Amitābha. He is seated with legs interlocked on lotus raised on rectang. stepped pedestal behind altar; hands within each other in lap, with tips of thumbs touching; no Dhyāni-buddha. In front small tank with duck and crane (?) standing on rocks; on either side of pedestal conventional white lion. Above is canopy, but no celestial buildings.

Four seated Bodhisattvas, ranged one above other, fill sides of picture. Tib. inscriptions on horizontal cartouches are attached to six upper of these, but two at top are illegible. From others the four central Bodhisattvas are identified as follows: On R. (Avalok.'s L.), above *Sarvanivaraṇaviṣkambhin*, below *Samantabhadra*; on L., above *Kṣitigarbha*, below *Mañjuśrī*. Two latter hold respectively flaming jewel and Pōthī; others have for most part one hand on knee and other raised in mystic pose; one, in L. bottom corner, with flesh dark green or grey, carries sword over shoulder (cf. banner *Ch. xxvi. a. 007). All sit with feet crossed and one knee slightly raised; type of features, dress, and ornaments throughout 'Indian', as in Ch. lv. 007, *0014, etc.

Avalok.'s flesh yellow; that of Bodhisattvas (with exception of one referred to above) pink; outlines of flesh red; hair black; colouring of robes, accessories, circular haloes, and vesicas crimson, dark green, slate blue, and yellow. Traces only of donors below; details of costume indistinguishable. Workmanship mediocre. 3′ 2″ × 2′.

Ch. 0075. Remains of embroidered silk panel, set in plain silk border of faded light green (?), 7½″ wide. Embroidery worked on light red silk gauze woven in lozenge diaper, and afterwards mounted on plain red silk, but not (as in most cases) worked through both silk and gauze. The two have consequently fallen apart; gauze survives only in frs. It consists of masses of leaves, flowers, and clouds, in brilliant reds, blues, greens, and purple; prob. all-over design like Ch. 00281. True satin stitch used throughout, so that embroidery is practically solid on both sides, and frs. consist of masses and trails of leaves with no gauze visible. Style of work entirely Chinese. Border (incomplete) 3′ 3″ × 2′.

Ch. 0076. Triangular head-piece from large silk banner, of plain red silk, glazed, with 3″ border of large-patterned floral silk. On triangular panel a seated Buddha, in yellow outline, eyes only in black. Pattern of figured silk, woven in red and pale yellow on ground of deep royal blue, consists of repeating 'spots', roughly elliptical and lozenge-shaped. Ellipses made of large lotuses, with double rays of pointed petals and four pairs of tendril-like leaves spreading from cardinal points. Lozenge-shapes, *c.* 8¾″ × 7½″, made of central four-petalled rosette (trilobate petals), with palmette-shaped half-open flowers growing from trefoil sheath on two opposite sides, i. e. along short diagonal of lozenge. On each of other sides, i.e. along long diagonal, a pair of flying birds, facing inwards, with a pair of curved bracts between their heads, and similar palmette-shaped flowers between tips of their wings, forming top and bottom points of lozenge.

These lozenge-shapes repeat horizontally, nearly touching, across material; but their extremities above and below separated from adjoining rows by space of about 1½″. Treatment of bird and flower forms quite Chinese.

Weave, a very loose kind of satin twill; warp, very fine and well sized; the weft broad, flat, and untwisted. Flowers and leaves woven in red with yellow outlines, flower centres and ribs of petals in blue; birds in yellow outlined with red. Yellow has completely lost colour, and red much faded. Material somewhat split. Base of panel *c.* 1′ 8″, length of sides 2′. Pl. CXI, and p. 906.

Ch. 0077. Nine artificial flowers of wood or paper, tied up in linen square (miniature canopy). Flowers made of diminishing series of paper discs or squares (buff, brown, black, red, and green), cut round edges in petal form and pasted one on top of another. To middle of back is gummed small disc of wood or gourd for strengthening purposes. One flower formed of larger wooden disc, covered with white-spotted green paper, and surrounded by red paper petals gummed on to back, with inner whorl of red and black paper petals. See also Ch. 00149. a–e. Average diam. 3″.

Ch. 0078. Rectang. border of coarse linen, orig. binding bamboo manuscript-roll cover like Ch. xx. 006. Ends only of mat-work remain in ends of border. Linen was covered with strips of silk brocade, of which one still remains sewn along one side. Colour and design indistinguishable. 1′ 10½″ × 1′.

Ch. 0080. a–c. Three painted linen banner-tops: *a* and *b* (single), evidently the front and back of a double banner-top; *c* (double) complete, with border, suspension loop, and wooden strainer. Each painted in red, green, and yellow, with Buddha seated in meditation on lotus; rough work. *a* and *b*, h. 11″, base 2′; *c*, h. 8″, base 1′ 5″.

Ch. 0081. Painted silk banner; considerably broken, upper end of painting and all accessories lost.

Subject: *Bodhisattva*. Stands ¾ R. on two lotuses, resp. brown and red, R. hand raised in *vitarka-mudrā*, L. at breast holding in palm white lotus bud tipped with blue. Dress and style of work as in *Ch. 002, but painting on smaller scale. Robe very full, pulled up in bag-like folds over chains; colouring soft and dull. Under-robe dark red, skirt dark red shaded with lighter tint, stole dull blue and green. Flesh pinkish white outlined with dark pink; tiara a white fillet with red lotus bud over forehead. Face short and full, with mild thoughtful expression. 1′ 4″ × 5½″. Pl. LXXXII.

Ch. 0083. Painted silk banner; all accessories lost; broken about top and faded, but fig. almost intact.

Subject: *Bodhisattva* with censer. Stands facing spectator on lotus originally pale blue; R. hand raised holding censer, L. also held forward from elbow, palm uppermost and slightly depressed, fingers open, except third finger, which is bent. Fig. and style of work as in *Ch. 002; dress same with slight differences. Arms are bare to shoulder, and stole takes form of flat narrow band, hanging in V-shaped curve to knees and thrown in narrow pointed loops over arms. It is vermilion—still brilliant though colour has otherwise almost disappeared—and brings out skilfully main line of fig.'s pose. Face long, broad, and rather heavy, projecting to chin; underline of eyes almost straight; ears slightly elongated and pierced, but without rings. Most of hair and tiara lost.

Fine example of treatment of drapery, but much worn. For replica (reversed) see Ch. i. 005, also Ch. lv. 0026; for same pose of hands Ch. 009.

1′ 11¾″ × 6⅞″.

Ch. 0084. Silk painting representing *Kṣitigarbha* as Patron of Travellers, seated alone with boy donor below. Of pale green silk broken only at lower end, and with border of greenish-blue silk complete. For other representations, see under *Ch. 0021. Kṣitigarbha is seated cross-legged on red and white lotus, R. hand holding beggar's staff, L. crystal ball, flaming, on his knee. Dress, a light green under-robe and mantle, latter bordered with black, and on head traveller's shawl of Indian red orn. with faint spot pattern in yellow. Face is round and youthful with mild expression, and like feet and hands coloured flesh-pink all over, and outlined with red.

Broad band of white, forming edge of circular vesica, surrounds whole fig. and lifts it out of green background with which it would otherwise blend too closely. Inner part of vesica and halo orn. with usual conventional ray and flower-petal pattern in green and red, with flame border, which like outer border is painted white; red and green flower sprays fill corners of the background.

Of boy donor only upper half remains, kneeling in L. bottom corner, bareheaded, with lotus flower between joined hands. He wears a loose-sleeved red coat, sprinkled with circular flower or wheel pattern in yellow and black; hair done like that of little boy attendants or donors in Ch. 00224; xlvi. 008, 0013. Rest of bottom of painting empty, except for red flowers on tall stems on either side of boy and blank inscription cartouche in front.

Drawing throughout of comparative delicacy, but great charm of picture lies in quiet and simplicity of its composition and colouring. 1′ 10″ × 1′ 3½″. Pl. LXX; *Thousand B.*, Pl. XL.

Ch. 0085. Painted silk banner; all accessories lost, painting incomplete top and bottom and somewhat cracked, but otherwise well preserved and colour fresh.

Subject: *Vaiśravaṇa, Guardian of the North.* Stands facing spectator on demon of which only head and shoulder remain; L. hip thrown out and R. knee bent. R. arm is curved stiffly out and hand low, grasping stem of two-headed pike, which rises above head; L. arm is raised from elbow, a cloud of smoke rising from the hand and carrying miniature hexagonal shrine with pagoda roof, containing seated Buddha.

In pose and dress the fig. follows type of 'Indian' Lokapālas, Ch. xxvi. a. 006, etc. (see also *General Note*, *Ch. 0010); but it is on larger scale, and drawing lighter and cleaner in line. Colouring very bright and variegated; but owing to the stiff and composite nature of the dress it is cut up into a number of bands and compartments, and produces patchy effect. In detail the dress shows certain variations from ordinary type.

Coat of mail has oblong scales painted white and blue on skirts and shoulder; blue end at top. Hence if blue is intended to represent shadow, the scales overlap downwards. On body the scales are round-edged, and painted in yellow and red. Border of skirt round thigh and up front is painted solid blue without usual green pleated edge. Corslet is of green spotted with yellow, but most of it is covered by a blue breastplate, shaped like a deep yoke, which passes over shoulders, and which along with corslet is held there by buckled straps, coming from the discs over breasts. Flaps over hips are vermilion edged with purple, and their upper edge is girt by hip-belt and stands up stiffly above it. The apron is small and sq. and made of scale-armour, round-edged and within green border.

Skirt is vermilion with bright blue border; red rosette amongst green leaves is painted on knees of white breeches. Greaves are of scale-armour, scales being round-edged, white, and edged with vermilion, and have a band of plain leather down front and round ankle. Shoes are black orn. with gold. Arm-guards painted in stripes of white and vermilion running round arm. Stole of chocolate and blue (the blue mostly lost) hangs across back from elbow, and to ground. Short white draperies also hang at back of shoulders as in 'Indian' Bodhisattvas, *Ch. lv. 0014, etc. No sleeves are visible, and there is no collar, so the neck is exposed.

Tiara is a fillet of red drapery orn. with scarlet lotus buds, and large gold orns. over forehead and ears. Hair is black, in a top-knot above and falling behind shoulders. Face large and heavy, with square jaws, wide mouth firmly shut, and grotesque eyes placed obliquely. Halo green, with flame border. From pike flaps a pennon, painted in diaper of orange hexagons spotted with green, and with black and white vandyked border. Pike has lance-head with secondary curved and barbed spike at side, as customary in these paintings; see Ch. 0018.

1′ 5½″ × 7½″.

Ch. 0086. Large triangular head-piece to silk painting, of cream silk damask, doubled. Damask woven in large pattern of elliptical and lozenge-shaped 'spots', distantly recalling the 'Sassanian' type in general set-out.

The elliptical groups measure *c.* 1′ 9″ × 1′ 6½″, and consist of inner and outer wreath of boldly looped and interlacing bands with trumpet-mouthed ends. In inner 'corners' of ellipse large rosette-ornamented ellipses; in centre of inner wreath, and at four cardinal points of outer, are orns. of mixed geometrical and floral character. These consist of a lozenge surrounded by trilobate half-flowers; in outer wreath they

seem to correspond to the small overlapping circles uniting the Persian medallions. Same general forms compose lozenge-shaped 'spots'.

The trumpet-mouthed bands are of very distinctive character, and found again in Ch. 00278 (lozenge spots only), 00293. a, and 00339.

Border of plain silk of pale blue-green, and suspension loop of strong linen. Beneath hangs square of plain greyish-brown silk, 1′ 11½″ wide from selvedge to selvedge and 1′ 9″ long, with wooden strainer at top and bottom. Perhaps this was the backing of a painting, but it is prob. incomplete.

Field of triangle painted on each side with Buddha seated on lotus, branching flowers of which fill corners. Buddha has childish features, *uṣṇīṣa*, *ūrṇā*, and long ears; his legs interlocked, R. hand in *vitarka-mudrā*, L. horizontal beneath it with palm up. He wears usual red mantle covering L. shoulder, and yellow under-robe covering R. shoulder and breast. Outlines black; elliptical halo and vesica in rings of faint green and yellow and of red and black; flowers and leaves in same colours. For another head-piece of same kind, see Ch. xxi. 003. Head-piece, h. 2′, base 3′ 1″; length of whole 3′ 9″. (Design of damask) Pl. CXVII.

Ch. 0087. Painted silk banner, much broken; all accessories lost except torn side streamers and border of head-piece of dull brown silk.

Subject: *Vaiśravaṇa, Guardian of the North.* Fig., straight, slim-waisted and very long-bodied, stands facing spectator with feet apart, resting on upturned hands of girl fig., whose head and breast rise from lotus. R. hand of Lokapāla, raised, holds miniature Stūpa (mostly lost); L. grasps stem of pike with pennon. Large sword in scabbard hangs slantwise across legs from broad black hip-belt.

Fig. differs considerably in dress and treatment from other Lokapālas (see *General Note*, *Ch. 0010), though dress follows in main lines that of the more 'Indian' Lokapālas (see Ch. xxvi. a. 006). Coat of mail exceptionally long in skirts. They reach to ankle, and leave visible below only billowy edge of some red drapery, and ankles and feet encased also in scale-armour. Scales very large, oblong on skirts, with small circle taken out of each high on R. edge, and overlapping upwards as shown by shading; round-edged over body, ankles, and feet.

Hip-belt put on very low; from it hangs short sq. green apron, and semicircular flaps of brown leather covering the hips. Skirts of the coat have no pleated edge, but an outer border of yellow, and inner border of red, orn. with large half-rosettes, olive and slate, placed alternately along edges. No corslet or breastplate; coat cut low, exposing a long neck. Twisted brown strap girds it around waist, and another comes over each shoulder and joins waist-belt in front, where the junction is covered by large circular red orn. Similar red discs are attached to vertical straps at breast. Broad band of green leather passes down front of coat of mail from neck to hip-belt. Brown stole hangs over arms; bunches of red and yellow drapery behind shoulders (as in *Ch. lv. 0014, etc.). The arm-guards are of the usual pattern, close-fitting and painted in horizontal bands of colour.

The face human, round and broad, with large level eyes under down-drawn brows, short high nose, small full mouth, wide moustaches and small imperial (black). Top-knot above almost hidden by high three-leaved crown, from which white streamers fly at ears. Ears elongated, with lobes distended by large stud earrings. No halo; but halo-like effect produced by curving tongues of flame which spring from the shoulders, their tips almost meeting canopy overhead. Latter much destroyed, but of *Ch. 002 type.

From its features, supporting fig. below is meant for girl (see above, pp. 871 sq.), but only face, shoulders, and forearms clad in tight-fitting red sleeves are visible. Face suggesting Īrānian type is round with straight almond-shaped eyes, and a mass of black hair falling behind. Lotus below is painted ornamentally slate and dull red, with olive leaves at side.

Pike has trident head; R. spike is lost but apparently existed, as pennon seems to have been attached to it by a gold orn. as in Ch. lxi. 001.

Drawing and workmanship throughout rough, and colouring coarse, consisting chiefly of opaque red and yellow, and dull brown. Yellow cartouche for inscr. to L. of head, blank. Painting 1′ 8″ × 7″, length with head-piece 2′.

***Ch. 0088. Large silk painting** representing *Avalokiteśvara* (Kuan-yin) standing, without attendants. Border lost; picture somewhat broken about top and bottom; paint worn off in places, but generally in good condition.

Fig. stands facing spectator, eyes downcast; R. hand raised from elbow holding willow spray between finger and thumb; L. hanging by side carrying flask. Dhyāni-buddha on front of tiara. Good example of mixed 'Indo-Chinese' style, the fig. still pervaded by very 'Indian' spirit though workmanship is Chinese. Artist has followed very closely 'Indian' arrangement of dress, type of fig., jewellery, and coiffure, and the characteristic 'Indian' pose of body, which is thrown very slightly out to R. with weight resting on R. hip. But stiffness of 'Indian' attitude and 'Indian' coils of drapery is transformed, as far as compatible with the pose, by sweeping Chinese brush lines. Fig. disproportioned, legs being decidedly short for large body and head, a fault noticeable in some of 'Chinese' Bodhisattva banners such as Ch. xxxiv. 001 and lv. 0019.

Colouring sober but harmonious, consisting chiefly of shades of dark red and green on dark greenish-brown of silk, and relieved only by white, shaded with light red, of flesh and of lotus buds which grow on twining stems on either side of fig. Most of this light paint, however, is lost. Fig. wears 'Indian' type of Bodhisattva dress as descr. in *Ch. lv. 0014, but with plain tight overfall, or short skirt, appearing from beneath girdle and covering long skirt almost to knees, where it is finished off by a short frill. This garment is found in one or two banners of semi-Indian style, and very often in linen paintings, where style again is mostly 'Indian'. Skirt clears feet; most of Padmāsana and R. foot are lost.

Skirt orange-red; overfall dark crimson sprinkled with

rosettes in olive and black; girdle olive-green; stole olive-green and dark grey; scarf across breast and draperies behind shoulders dark red-brown; jewellery and flask of same colour outlined with yellow and black. Hair black, done in high cone and falling in smooth mass behind shoulders. Eyes oblique, with both upper and under eyelid strongly curved. Halo circular, of variegated rings of reddish brown and grey; upper background filled with scattered flowers. In L. upper corner blank yellow cartouche for inscr.

3′ 4″ × 2′ 4″. Pl. LXIX.

Ch. 0089. Miniature silk banner; complete, body and streamers orn. with stencilled designs, but unpainted.

Body and head-piece are of plain red silk, cut in one piece and stamped with design of Padmāsana, with row of rhomboids below, and above vandyked valance beneath which hangs fluted canopy with jewelled edge. Above again are bands of scroll pattern. Pointed top bordered with fine light blue silk damask, woven in stripes of lattice pattern alternating (?) with rows of four-petalled rosettes.

Side-streamers of plain silk of same blue, stencilled with pendent leaf patterns. Two bottom streamers of plain green silk with pattern of undulating stem and leaves. Bottom streamers made by slitting one piece of silk down middle, but not to end either way; undivided lower end is fixed in groove of small weighting-board, painted yellow, with enclosed palmettes drawn in ink and background painted grey.

Length of whole 1′ 10″, apex to bottom of banner proper 11″; width $2\frac{3}{4}$″, side streamers 7″.

Ch. 0091. Large silk painting representing *Avalokiteś-vara* (Kuan-yin), standing, without attendants, but with two small donors low on R. side. Border lost, and whole of painting below knees of fig.; remainder intact though colouring much faded. Fig. stands facing spectator, head erect but eyes downcast; weight thrown on R. hip and body aslant to L. shoulder in characteristic 'Indian' pose. R. hand in *vitarka-mudrā* at breast with willow spray between finger and thumb; L. by side holding flask and twining spray of pink lotus which rises beside head. Dhyāni-buddha on front of tiara, which is simple circlet orn. with flaming jewels, light spray of leaves behind Dhyāni-buddha, and long tassels at ears.

The Bodhisattva is one of finest single figs. amongst the paintings, and despite loss of colour not unsatisfactorily preserved; for disappearance of paint gives greater value to clear and delicate drawing of face and fig. Workmanship shows perfect mastery of technique, but the fig. preserves notwithstanding air of individuality. This is specially noticeable in head, which is that of young man, and shows marked Gandhāra influence. Brow high; nose long and straight; eyes only slightly oblique, with moderately arched eyebrows at a normal distance above them, sweeping a slightly recurved line to outer edge of brow. The thinner cheeks and more natural spacing and proportion of features give the face a reality which those of conventional semi-feminine Bodhisattvas lack. Fig. is slim, pose dignified but gracious, expression of face meditative and remote.

Dress and hair are in 'Chinese' Bodhisattva style as in *Ch. 002, but with scarf only across breast instead of under-robe. Stole in (faded) grey and olive-green, jewellery and scarf across breast light red, the skirt brown (?); hair black, done in double-leaf form on top.

In R. lower corner appear two small kneeling figs., boy or man and girl, holding lotus buds. Boy's hair parted and tied in double bunch on either side of head; girl's simply parted and taken behind. Both wear plain long-sleeved robes, covering them from neck to feet; colour lost. Blank cartouche for inscr. on L. upper edge.

3′ $1\frac{1}{2}$″ × 1′ 11″. *Thousand Buddhas*, Pl. XVIII.

Ch. 0095. Painted silk banner; all accessories and upper end of painting lost; remainder well preserved.

Subject: *Lokapāla* (?) *or celestial attendant.* Stands $\frac{3}{4}$ L. upon curling clouds, feet apart walking, hands in adoration before breast. Wears modification of Lokapāla dress of Ch. xxvi. a. 006, but in physique is young, slim, and entirely non-grotesque. He carries no weapons, and his defensive armour is slighter and more elegant than the average Lokapāla's.

Coat of mail ends well above knee, in red flower-decorated border and green pleated edging, and has high open collar exposing front of neck. Corslet small, and buckles over shoulders with straps. Scales of the coat of mail oblong throughout; painted yellow, white, and green on upper parts, and white and blue on skirts; colour much lost. From beneath coat of mail, on arms, appear folds of crimson drapery, and long pleated green frills hanging at elbows. Lower arms are covered by wide soft sleeves of pink and white, bordered with green and sprinkled with green quatrefoils.

Skirt is fine crimson, with quatrefoil spot pattern in white and yellow. Its outer border, ground of corslet and arm-guards, and upper borders of coat of mail are slate-blue, picked out with narrow lines of white and black. Reverse border of skirt, sleeves, and collar, terra-cotta; hip-belt and borders of corslet, green; corslet-straps and shoes, black. Greaves have metal framework and elongated discs, painted as if of oblong scale-armour, with border of slate-blue leather, covering back of legs.

Face young and amiable in expression, with level narrow black eyes, long straight nose, and curved, parted red lips. Flesh white, shaded with pink; slight wavy black moustache and imperial; eyebrows and eyelashes drawn in fine arched black lines. The rich black hair festooned on forehead, with thick lock before each ear; dressed in drooping top-knot above, and held in place by light crescent-shaped bands of gold with jewel orn. over forehead and flaming jewels at ears. Ears are of normal length and have no rings; behind, a plain circular halo of greenish yellow.

Work and colouring good, but rather worn.

1′ $10\frac{3}{4}$″ × $6\frac{3}{4}$″. Pl. LXXXIII.

Ch. 0096. Painted silk banner; much broken and all accessories lost.

Subject: *Bodhisattva.* Stands facing spectator; L. hand

by side, R. holding up flat sq. object, metal-bound, with green top and pink sides, perhaps amulet-box. Single flaming jewel on front of tiara. Inferior example of *Ch. 002 type, which it follows in dress, accessories, etc. Colour much worn; chiefly brown, crimson, green, and black (on stole). Flesh left yellow-brown of silk and shaded with red; additional chains and necklaces (almost effaced) have been added on breast in orange. 1′ 6¼″ × 7½″.

Ch. 0097. Lower half of painted silk banner, retaining wide bottom streamers (two) of discoloured greenish-grey silk, and weighting-board of folded paper cut from Tib. Sūtra and painted red.

Subject: *Bodhisattva*, perhaps Mañjuśrī. Lower half only of fig. remains, standing on two small lotuses, R. leg straight, L. in profile and slightly bent. At top of R. leg are remains of hand holding Pōthī. Drawing very stiff and akin to that of 'Indian' banners, *Ch. lv. 0014; as are also garments represented. Thin straight outlines of legs are drawn in hard black lines as if they were bare; skirt drawn across them in series of conventional curved folds painted alternately hard yellow and red. Between legs and at sides folds are vertical. Green girdle passed round hips and falls also between legs, showing striped reverse side of red and white. On either side dull purple and blue stole falls in jerky curves to ground. Skirt clears ankles. Ankles and feet are bare and painted uniform flesh pink, outlines touched up after painting. Lotuses have flat elliptical green centres and single rows of down-turned petals: under R. foot white outlined red, under L. two shades of dull blue. Colouring well preserved.

Painting 11½″ × 7¼″, length with streamers 3′ 4½″.

Ch. 0098. Fr. of large silk painting, showing head and body of *Lokapāla,* perhaps Vaiśravaṇa. Face, seen slightly to L., is demonic and convulsed with rage, the widely grinning mouth showing tongue and both rows of teeth; eyes distended and glaring; eyebrows contracted, and forehead bowed with wrinkles across entire breadth. Nose and cheek-bones high, eyebrows bushy, moustache wide and sweeping up at ends. Chin fringed by stiff spreading beard and whiskers; ears slightly elongated and orn. with rings. Face painted dark grey, lips red, and hair black: all in good condition. Hair on forehead passes back under a tiara, set in centre with arch-shaped orn. surmounted by lotus and jewel. From the whole head streams up a cone of red flame.

Almost all paint is lost from rest of fr. Body, vigorous and muscular, is nude to hips, where edge of *dhōti* appears pulled over belt; but it is partly covered by jewelled chains, necklace, etc. R. hand held before breast, palm downwards and depressed; fingers stiffly upturned. Grey-blue stole gathered over upper arm. L. arm lost, but hand appears above, grasping staff of trident with barbed points. Whole fig. drawn with great verve and freedom.

Along top are traces of light blue and red decorated Padmāsana now almost indistinguishable; and in R. top corner, with further remains of the same red and blue, are folds of grey drapery which do not appear to belong to either subject. Silk perhaps used for several paintings in turn.

Gr. length 1′ 5¼″, gr. width 11½″. *Thousand Buddhas,* Pl. XLVIII.

Ch. 0099. Fr. prob. from large silk painting. Main part shows falling masses of dull pink and red drapery gathered in by band from which trail leaf-like streamers of red, blue, and green. Prob. lower part of women's dress as in Ch. 00114. Below to L. is upper part of head, ¾ to R., roughly drawn. Straight eyes and eyebrows; hair dressed in double-leaf form projecting backwards from corner of head and orn. with two cones bearing lotus buds. In L. upper corner is part of lotus pedestal supporting jewel. Seam on R.

Gr. M. 4¾″ × 7¼″.

Ch. 00100. Fr. of embroidered silk hanging, representing diaper of seated Buddhas. Worked solid, with untwisted silk, in close rows of chain-stitch on strips of fine light grey silk. Strips 4½″ wide, joined side by side, two Buddhas seated in meditation on single lotuses occupying width of each. Robes dark purple, carmine, and Indian red; faces and hands whitish buff; circular haloes light cinnamon and buff; outlines of face, ears, and nose Indian red; eyes, eyebrows, and hair, vivid dark blue; lotus petals whitish and cinnamon outlined dark purple and red; background dull pale green. Repaired in antiquity and figs. irregularly joined.

On outer strips appear fragmentary scenes of more Chinese style, and another lighter and more brilliant blue is introduced. On L., larger single Buddhas seated in meditation under fringed and streamered canopies. On R., below Buddhas of prevailing type, a group consisting of male fig. advancing L. followed by two attendants, one of whom holds over him large umbrella. All are in Chinese secular costume, long belted coats, high boots, and sq. cap (?). Coats light blue and cinnamon; boots and outlines of faces purple; nose, eyebrows, hair, and caps dark blue; umbrella purple and dark red.

Below, another group with larger fig. advancing R., followed by three attendants, one again with umbrella. Before him grows purple and white lotus bud on curling stem. Larger fig. wears light blue stole, and has no halo. Behind him three heavy folds of drapery (?), worked in straight rows of chain-stitch couched with buff silk in pattern of twining lines, fall stiffly to ground. Lower part of an exactly similar scene appears also on upper edge of panel.

Colouring of whole deep and mellow; work very solid and carefully executed. General outline of haloed Buddhas, internal lines defining folds of drapery, sticks of umbrellas in side-scenes, etc., are still worked in dark brown in places; but perhaps this was only the orig. guiding line for embroiderer in his filling-in work. In most places narrow line-space left, perhaps for couched strips of gold paper later removed.

Irregular joining of strips, both vertically and horizontally, and the insertion of figs. already partially destroyed in antiquity prove extant hanging to be patchwork made up from an earlier embroidery; cf. above, p. 896.

2′ 8″ × 2′ 1″. Pl. CV.

Ch. 00101. Silk painting, with Chin. inscr., representing *Bhaiṣajya-buddha* seated, with donors. Complete and in excellent condition, but without border.

Buddha sits with legs interlocked on variegated lotus raised on low circular stand; R. hand raised in *vitarka-mudrā*, L. on knee holding transparent alms-bowl. Begging-staff fixed upright in wooden stand in L. background. Circular halo and vesica of plain concentric rings of different colours, and tasselled canopy. Donors stand in bottom corners, woman on L. with hands in adoration, man on R. holding censer. Woman's dress as in *Ch. 00102, etc., but brightly coloured in pinkish red, blue, and green, and with no flowers on head-dress orn.; man's, a dark-brown belted coat reaching to feet, and peaked black cap with tails.

Chief interest of painting lies in colouring and in dedicatory inscr. Former shows same striking blend of carmine, cobalt (?) blue, and apricot, seen only, apart from this painting, in Thousand-armed Avalok., Ch. xxxiii. 002. Colours here even more brilliant, and with them has been combined a certain amount of copper-green now mostly flaked off. Workmanship good.

Inscriptions consist of (1) salutation to Bhaiṣajya, one l. in R. top corner; (2) name of woman donor, one l., on cartouche in front of her; (3) dedication, 3 ll., on oblong panel on R. edge; cf. Petrucci, Appendix *E*, II. 2′ 4½″ × 1′ 9½″.

***Ch. 00102. Silk painting** with Chin. inscr. representing *Eleven-headed and Eight-armed Avalokiteśvara* (Kuan-yin), seated, with attendants and donors. Complete and in good condition with border and suspension loops of coarse brown linen.

Avalok. sits in middle on variegated lotus rising from small tank, from which also rises before him altar with sacred vessels. In pose, physical type, dress, colouring, arrangement of heads, and treatment of vesica, halo, and canopy, he is typical of practically all six- or eight-armed seated Avaloks. in Collection, and one of best preserved. For others, see Ch. 00105; xx. 004; xxi. 0014; xxii. 002, 0010; xxviii. 004; xxxvii. 001; xl. 008; xlvi. 0013; also for two-armed seated Avaloks., Ch. 00167.

His legs are interlocked; his first pair of hands uplifted, supporting on open palms symbol of Sun and Moon,—Sun hereon R. hand, Moon on L., though L. hand as place of greater honour is usually assigned to sun. The symbols themselves embody original Chinese non-Buddhistic myths (see Mayers, *Chinese Reader's Manual*, ss. 235 and 957), and consist of two discs, red and white resp.; the former containing three-legged Sun-bird, the latter tree of immortality, hare pounding drug of immortality in mortar, and frog. Sun-bird, always of phoenix type, with crested head, long neck and legs, outspread upcurling wings and long tail sometimes represented by quasi-floral scroll curling over his back. Second pair of hands in *vitarka-mudrā* on either side of breast, each holding long-stemmed pink and white lotus between finger and thumb; third pair are held out at sides, R. hand supporting flask, L. flaming jewel; fourth pair lie on knees, R. holding noose, L. rosary.

Heads arranged with two large ones in profile on either side of chief head, and pyramid of eight small heads on top. Of latter seven are Bodhisattvas', and one at apex in centre of top row represents Dhyāni-buddha Amitābha. Heads in profile are (in this instance and most of others) coloured resp. olive-green and light blue; owing to curious convention of drawing profile by line of cheek, and adding nose and under-lip as excrescences, a grotesque effect is produced. Amitābha's head is here gilded (usually yellow); small Bodhisattva heads correspond in colour to main head.

In this case head and fig. of Avalok. are deep pink, outlined with darker shade of same and shaded with orange. Hair is black, falling in mass behind shoulders, eyes almost shut and quite straight, with black pupils and red irises. Dress that of the 'Indian' type of Bodhisattva, as seen in *Ch. lv. 0014; with crimson skirt, olive-green girdle, crimson scarf across body, pink and white drapery hanging behind shoulders, heavy chased necklace and armlets, and narrow olive-green stole winding in wide flat curves about arms. Hair is bound with crimson fillet, set with three rosettes and falling in short streamers about ears.

In all instances Avalok. wears string of black beads round throat; usual jewelled chains gathered into central orn. below waist. All jewellery was here gilded apparently over layer of pale blue paint; but only traces of either remain. Skirt and reverse of stole were also sprinkled with gilded rosettes; skirt further orn. with ornamental flower-caps over knees. Halo and vesica are always circular, orn. with waving rays, straight vandyked rays, petal and jewel ornaments as in Paradise pictures, *Ch. lii. 003, etc.; canopy hangs on two of red-flowering trees also descr. in above.

Attendants vary in number according to size of picture, but seldom form as large a company as here, where they comprise: in upper corner ten small seated Buddhas representing Buddhas of ten quarters of the three worlds; two Lokapālas; two monkish disciples; four Bodhisattvas distributed evenly upon either side; and two demonic kings, enveloped by flames, sitting cross-legged on either side of tank. Before each of eight principal attendants is well-preserved inscr., which explains their identity as follows:

(i) Two kings, who alike carry swords, are *Dhṛtarāṣṭra* on L., and *Virūḍhaka* on R. Both of ferocious aspect; their armour as in Lokapālas of banners; see *Ch. 0010.

(ii) Two monkish disciples, standing with their hands in adoration immediately beside Avalok., are *Subhūti* and *Śāriputra*. Both are haloed, have short-cut black hair, and wear dark brown, yellow, and crimson robes. Features of Subhūti are slightly grotesque. The two figs. seem to bear some relation to the Good and the Evil Genius, who accompany Avalok. in other paintings; see Ch. lvii. 004; Appendix *E*, III. x.

(iii) The attendant Bodhisattvas have no distinctive emblems, and inscriptions convey only epithets of general significance. Two have robes and hair of 'Indian' type, two of the more flowing *Ch. 002 type; their hands in adoration or in *vitarka-mudrā*, all carrying lotus buds.

(iv) The demonic protectors below are four- or six-armed

and also attired as Bodhisattvas. They have small moustaches and beards, enlarged eyes, and coarse features, but are not of developed Tantric type. They carry club, eight-pointed wheel, lotus bud, coin, much conventionalized example of skull sceptre, and pole prob. of an axe, of which the head is indistinguishable.

Prevailing colours are dull green, orange-red, dull pink and yellow, on greyish-green background; flesh pink and white; metal-work all gilded; workmanship mediocre and somewhat stiff.

Lower end of painting contains central panel with dedicatory inscr., 12 ll., fairly preserved; see Petrucci, Appendix *E*, II. On either side donors kneeling, three men on R., three women on L.

Their dress is characteristic both in form and colour of tenth-century donors, and identical with that in Ch. lviii. 003 (A.D. 963); lvii. 004 (A.D. 983), etc. For the men it consists of wide-sleeved black coat, girt with red belt round hips and continued in long skirts below. These fall apart as the figs. kneel, showing underneath short gathered skirt of yellow or white, spreading over thighs, and finished off by black and red border. White breeches appear below covering knees; coat sleeves bordered by strips of red flower-patterned stuff and lined with yellow or white. On their heads are black hats with plain round crown rising in blunt upward peak at back, wide stiff brim or two stiff flat ears projecting at sides. As hat is always seen from same point of view, form of this member remains uncertain.

Women wear under-bodices crossed over breast, long trailing skirts girt under arms, and jackets with very wide sleeves which fall to knees when they join their hands on their breasts. Over their shoulders are narrow stoles, often of figured material, and round their necks strings of black beads and in many cases elaborate netted necklaces. Skirts are of any colour (here olive-green and dull blue-grey); jackets are always black, sometimes sprinkled with flower patterns and finished at sleeves with bands of flowered stuff like men's. In this instance the second woman's is sprinkled with red rosettes and sprays of yellow leaves; but those of other two are plain.

Most elaborate part of costume is their coiffure. Hair is done low on either side of face, and in large mass round head, sloping generally upwards towards back. Over forehead is placed metal orn. in the shape of double horizontal band, from which a forest of flower orns. rises above, and four or six long pins project horizontally at sides. Whole is painted in yellow or white and was apparently of metal. In overloaded examples (see Ch. 00167) this has cumbersome effect; in the simpler it is comparatively graceful.

The men's flesh (as in secular scenes by side of large Paradise pictures, *Ch. lii. 003, etc., and in banners of Life of Buddha, Ch. 0039, etc.) is always painted uniform flesh-pink; the women's white with red cheeks and lips; hair and eyes of all are black. Women's figs. and features often gracefully and delicately drawn. All donors usually hold offerings: here men hold censer, flask (?) or miniature Caitya (?), and lotus bud, and foremost women an outspread lotus on dish. The others have their hands muffled in their sleeves upon their breasts. 3′ 7″ × 2′ 10¾″. Pl. LX.

Ch. 00103. Remains of large silk painting, evidently representing *Six-armed Avalokiteśvara* seated, with attendants. Type of Ch. 00105, etc. Much broken and repaired in antiquity; drawing and colour almost effaced. Traces remain of attendant Bodhisattvas, Nymph of Virtue, and Sage (on R.); floating nymphs in upper corners. Frs. of broad (5″) silk damask border along top and one side; buff, woven in small lozenge lattice-work and printed with large designs in greenish indigo: along top, medallions bordered with interlacing band pattern and enclosing animals; at side, large repeating lozenge-shaped rosette or flower group. 4′ 7″ × 3′ 4″.

Ch. 00104. Remains of large silk painting, representing *Paradise of Amitābha or Śākyamuni*, with side-scenes showing legend of Ajātaśatru and meditations of Queen Vaidehī, as in *Ch. 0051. Composition and general treatment similar, but 'Indian' style marked in certain figs. Picture prob. on smaller scale than usual, as groups are much compressed from top to bottom. Whole of centre up to side-scenes on either edge preserved, and lower portion of L. side; but somewhat broken, and surface worn.

The presiding Buddha holds Śākyamuni's rice-bowl in L. hand; his R. is in *vitarka-mudrā*; flesh yellow shaded with bright orange; hair (with small moustache and imperial) slate-blue. The two chief Bodhisattvas are of entirely 'Indian' style, their dress, haloes, orns., and physical type being those of the 'Indian' banners Ch. lv. 004, etc., and the attitude of both being the Indian 'Enchanter's Pose'; cf. Ch. lvi. 0034. Both have Dhyāni-buddha on front of tiara, but one, on L., prob. Avalokiteśvara, carries also a long-stemmed scarlet and white lotus. His head also leans over one shoulder in characteristic 'Indian' pose. Between these two and the central Buddha appear on each side heads of two other Bodhisattvas, the faces of two of whom are painted dark blue. One of these (nearest to Avalokiteśvara) has an ordinary small pink and white lotus on the front of his tiara; but the tiaras of the other three carry a row of narrow upright red-tufted orns. resembling burning candles, and not seen elsewhere in the paintings. The same emblems appear crowning an offering which a Bodhisattva below is presenting to the central Buddha on an open lotus. This offering has a circular gold base and green pyramidal centre, in top of which are stuck the three 'candles'; round sides of it rest three green jewels which stand upon their edges in gold circular settings.

The majority of the attendant Bodhisattvas are of the *Ch. lii. 003 type; but two of them, who sit holding up glass jars evidently intended for lotuses, have no tiaras or top-knots, their hair being drawn back flat over top of their heads and tied in drooping knot behind.

Before Bodhisattva group on either side kneels a nymph, with back to spectator, playing on musical instrument; the one on L. upon a lute, which she seems to hold under her chin like a violin and plays with a plectrum; the other on

good specimen of psaltery, on which five bridges and strings are marked. These nymphs' head-dresses are again unusual, consisting of red bronze-bordered cap completely covering the hair except round forehead, with hole at corner of head through which top-knot escapes.

Before altar are the usual musicians and dancer group and at bottom of fr. on L. remains a subsidiary standing Buddha, with Bodhisattvas, a nymph, and a pair of Bodhisattva-headed Garuḍas, one of whom plays on clappers. The orchestra play on clappers, harp, flute, lute, and psaltery, all of *Ch. lii. 003 type; the dancer has her arms flung out in violent gesture about to strike a narrow-waisted drum which hangs at her waist. A number of infant souls disport themselves in water amongst pairs of mandarin ducks—chasing each other, clambering on to railings, and diving into lake. They are naked except for scarlet boots; heads painted blue-grey to represent down.

Colouring is rather coarse, and consists chiefly of orange-red, crimson, and green on the terraces and railings; same colours supplemented by grey-green and dark pink on robes and stoles. There is no blue except for faintly bluish grey hair of some of the figs. or of their stoles. Hair of all other figs. a peculiarly dense gritty black, their flesh white shaded with salmon-pink, which has largely worn off. Metal-work and jewellery mostly painted 'bronze'-colour as in *Ch. 0051; but the orns. of upper line of Bodhisattvas a coarse yellow. Drawing hasty, and workmanship generally careless in detail; but the figs. in movement show vivacity and character.

The *side-scenes* (see *Ch. 0051) are fragmentary, but appear to represent, on R.:

(i) Former incarnation of Ajātaśatru as hermit. He is bound and being beaten by three men outside door of his hut, while a dignitary on horseback looks on;

(ii) Ajātaśatru flying out of palace; rest of scene lost.

(iii) Ajātaśatru pursuing his mother with sword; the minister and physician in foreground, also with swords, ready to intervene;

(iv) Vaidehī visiting Bimbisāra in prison.

On L. are fragmentary scenes of Queen Vaidehī meditating on *Sukhāvatī*; the only objects of her meditation preserved being (1) the Sacred Lake with lotuses growing in it; (2) Buddha Amitāyus (or Amitābha) with smaller Buddha on his L.; a third was prob. beyond broken edge; (3) a conventionalized canopy (?); (4) a Bodhisattva seated in 'Enchanter's' pose; (5) a Bodhisattva in same attitude with three small Buddhas in sky over his head; (6) a Buddha standing on lotus in middle of tank; (7) a tank with large scarlet lotus in it. Vaidehī wears a white skirt and scarlet jacket, and has her hair done in high loops as in *Ch. 0051, etc., but with a curious framework of metal hoops containing the whole coiffure.

3′ 6″ × 3′ 10″.

Ch. 00105. Large silk painting representing the *Eleven-headed and Six-armed Avalokiteśvara* (Kuan-yin), with attendants and donors. Broken down middle, and round edges; much faded; details of R. half almost effaced.

Dress, pose, arrangement of heads, and general type of central deity as in *Ch. 00102. Padmāsana raised on hexagonal pedestal behind altar; no tank. Upper hands L. and R. hold up resp. discs of Sun and Moon, their inhabitants effaced; second hands placed together at breast, palm to palm and pointing downwards, tips of thumbs and fingers joined; lower hands prob. both on knees; L. is lost, but R. holds rosary.

Attendants are those usually found accompanying the Thousand-armed Avalok. (see *Ch. 00223), and consist of two Lokapālas (in top corners), Bodhisattvas of Sun and Moon, Nymph and Sage, and two demonic Vajrapāṇis (in bottom corners). Lokapālas' accoutrement is that seen in banners (see *Ch. 0010; lxi. 001); Virūḍhaka on L., with club, seated on flat-topped rock widening from base; Virūpākṣa on R., of ferocious aspect, with sword. Bodhisattvas of Sun and Moon are not, as usual, small figs. seated on their geese and horses within their discs of red and white; but large Bodhisattvas of *Ch. 002 type, kneeling amongst rest of company with their hands in adoration, and with red or white disc floating above their heads. Nymph wears here white robe under long straight tunic of crimson, and on top wide-sleeved light red jacket with wide grey collar bordered with metal scroll-work. Her hair seems to be done in top-knot within circular metal tiara, but over it veil of crimson drapery, supported on some invisible framework to form stiff flat cover over top of head and falling in long straight streamer down back. Uplifted and foreshortened face of Sage, a good piece of drawing. Vajrapāṇis almost effaced; but flames about them arranged in yellow pear-shaped whorls containing in centre screaming bird's head from which radiate waving lines suggestive of plumage.

White cartouches (blank) for inscr. have been added by each fig. after painting had been finished. Whole has been painted over quite different original picture, prob. large Bodhisattva, traces of which are visible where paint is most worn. Latter has largely disappeared throughout, but consisted chiefly of light red, green, crimson, and grey on light grey ground. Drawing of somewhat freer and more flowing style than in *Ch. 00102.

At bottom, heads of three women and four (?) men donors, much worn, of same character as in *Ch. 00102.

4′ 6″ × 3′ 7″.

Ch. 00106. Lower half of painted silk banner, much broken, with tattered remains of three bottom streamers of plain indigo silk (detached). Colour well preserved.

Subject: *Vaiśravaṇa, Guardian of the North.* Stands facing spectator, on head and arm of seated demon, knees bent outwards, L. hand by side grasps pike-staff; R. arm and whole of fig. above waist, lost. Dress that of 'Indian' type of Lokapāla, Ch. xxvi. a. 006; see also *General Note*, *Ch. 0010. Part preserved shows narrow skirts of coat of mail reaching to knees with oblong scales shaded as if overlapping upwards; greaves; black shoes orn. with gold; traces of orange skirt, and stole of dull chocolate and blue.

A shaped tiger-skin falls in deep flaps over hips and in trefoil-shaped apron in front. Greaves are of scale-armour, scales round-edged, overlapping upwards, and arranged in

three horizontal bands, pink, green (?), and yellow, with a metal (?) framework.

The demon is of bald 'Chinese coolie' type, and wears an expression of suffering. Painting is finished below by a wooden railing, painted red; lower panels filled in with design of half-rosettes on chocolate ground. Work rather rough.

Painting 1′ 5″ × 7¾″, length with streamers 3′ 8″. (Lower end) Pl. LXXXV.

Ch. 00107. Painted silk banner; fragmentary, all accessories lost, surface worn.

Subject: *Vaiśravaṇa, Guardian of the North.* Stands facing spectator, L. hand (lost) grasping pike with triple pennon, R. hand raised carrying miniature Stūpa on palm. Upper part of canopy and all below knees, lost. Dress, attitude, and style of drawing as in 'Indian' Lokapālas (see Ch. xxvi. a. 006; also *General Note*, *Ch. 0010).

Skirts of coat of mail are long and narrow, and must have reached knees. Scales oblong on shoulders, as well as on skirts, and are shaped as if overlapping upwards. On head a tiara formed of wide gold winged orn. set on fillet of red drapery which flies up in streamers at ears. Round the neck narrow leather (?) collar, the ends of which are passed through ring at top of corslet in front.

Hair black, done in high cone on top and falling in mass behind shoulders. Face short and round, with long nose, small mouth, round white demon eyes, and wrinkled forehead and eyebrows. There are short curled-up moustaches, and tuft of beard on chin. Ears slightly elongated and orn. with rings. Halo plain green circle without flame; at top remains of tasselled canopy.

Colouring, rather faded, consists of yellow on scale-armour (oblong scales being shaded with orange), dark blue-grey on collar, corslet, and apron; dull crimson on border of coat of mail, belts, stole, and border of corslet. Flesh warm flesh colour. Yellow cartouche for inscr. to L. of head, blank. 1′ × 5¾″.

***Ch. 00108. Painted silk banner** with Tib. inscr.; both ends and all accessories lost. Remainder in fair condition. For other banners from same series see Ch. xlvi. 0010, 0011.

Subject: *Avalokiteśvara* (Kuan-yin). Stands facing spectator, with body slightly inclined to R. hip, and head towards R. shoulder; R. hand raised carrying red lotus bud, L. horizontal before breast with thumb and forefinger joined. Dress, jewellery, and coiffure of 'Indian' type as in *Ch. lv. 0014, but with addition of jewelled chains dangling at sides. Face short and broad with eyes scarcely oblique; circular halo of concentric rings of various colours; remains of painted valance above.

Drawing mediocre; colouring chiefly scarlet, dull green, and maroon pink.

Donor's inscr. on rev. reads *Lho stag botan gyi bsod nams*, i.e. 'Felicity of Lho stag botan'—the name meaning, 'Bearer of the Southern Tiger' (L. D. Barnett). 1′ 6″ × 5″.

Ch. 00109. Remains of painted silk banner; all accessories lost and edges broken.

Subject: *Bodhisattva.* Stands facing spectator, head turned towards L. shoulder; R. hand holding up scarlet lotus bud, L. held horizontally before breast, palm up. Fig., dress, and accessories of type *Ch. 002, but badly drawn and finished. Colour almost gone except for red (on folds of skirt, lotus petals, etc.), and maroon (on stole), with traces of grey on rev. Face long and heavy, coarse imitation of type of Ch. 0083, with wide semicircular setting marked for eyes, and wrinkles from nose to corners of mouth. 1′ 6¾″ × 5″.

Ch. 00110. Two frs. of painted silk banner, all accessories lost, showing *Avalokiteśvara* (Kuan-yin). Upper fr. shows head, leaning over R. shoulder; lower shows fig. from hips down in long red robe with lotuses under feet, and L. hand by side carrying flask. Face, coiffure, and dress of 'Indian' type; but circular halo and tasselled canopy of type *Ch. 002. Colouring much lost; remainder chiefly crimson, pale blue, and green. 5″ and 6¾″ × 5⅝″.

Ch. 00111. Painted silk banner; much broken and worn, both ends and all accessories lost.

Subject: *Kṣitigarbha* as monk. For other examples, see *Ch. i. 003. Stands ¾ L., R. hand holding flaming jewel, L. in *vitarka-mudrā* at breast, feet and crown of head broken off. Dress consists of under-robe and mantle covering both shoulders; mantle dull brown mottled with red and barred with black, under-robe apparently dull red and brown. Jewellery consists of ear-rings, necklace, and double-hoop bracelets painted in yellow only. Colour of shaven head doubtful owing to brown discoloration above L. ear. Mild expression; face full and round with small mouth and eyes only slightly oblique. Part of round halo, red and brown. Yellow cartouche for inscr. to L. of head, blank. 1′ 0½″ × 5½″.

Ch. 00112. Frs. of painted silk banner; all accessories lost. Shows forehead to knees of standing *Bodhisattva*, ¾ to L.; much even of this lost. Hands in adoration before breast. Dress, physical type, etc., as in *Ch. 002, but workmanship rougher and colour poor. Latter remains chiefly in dark pink of skirt, and slate and green of stole. 8¾″ (joined) × 5½″.

Ch. 00113. Two frs. of painted silk banner showing lower part of standing *Bodhisattva*, draped as in *Ch. 001, etc. Skirt dull blue, stole bright crimson with orange-red on rev. and on border of skirt. Feet and ankles bare; pink lotus underfoot. Surface much faded and worn. All accessories lost. 9½″ × 5¾″ and 3″ × 7″.

Ch. 00114. Painted silk banner; broken top and bottom; all accessories lost. Dirt-speckled but otherwise well preserved, and scenes fairly intact.

Upper half shows in two groups the *Seven Ratna*; top group consisting of wheel, strong-box (here apparently representing the jewel; cf. Ch. xxvi. a. 004), the general and the wife; lower group of minister, elephant, and horse. They stand on curling white clouds, edged with red, blue, and green. Wheel lies flat; painted solid yellow—six spokes visible. From its axle springs short lotus pedestal supporting

a flaming jewel; similar jewels adorn backs of elephant and horse.

General clad in full armour, consisting of helmet with gorget, and coat of mail descending to feet, both painted yellow. In his R. hand narrow oblong shield, and in L. lance with terra-cotta pennon bearing two Chin. characters. Coat evidently of leather scale-armour (cf. *Ch. 0010, *General Note*, Lokapālas); rows of scales indicated by parallel lines, individual scales not marked except on short apron hanging in front, where they are round-edged. Lady's dress and coiffure same as in Ch. xxvi. a. 004; but her sleeves are so wide as to reach ground; and from under their ends spread to R. and L. long leaf-like streamers, purple, blue, and green (cf. fr. Ch. 0099). Minister's dress is like hers, but without streamers. Instead long terra-cotta band, tied in bow and ending in fringe, hangs down his back and sweeps after him. This seems to be mark of distinction of some kind. It is always found in the case of Court or official dignitaries (see Ch. xlvi. 007; xlix. 006, etc.). His hair seems to be short, and crowned by high sq. black cap. Horse and elephant are white, horse with red mane and tail.

Below two *Scenes of Buddha's Life.* Scene 1. *Buddha's Bath in Lumbinī Garden.* Infant Buddha stands in gold laver, raised on stand between two palm trees. Their tops are lost in mass of black cloud, and in cloud, grouped arch-wise, appear heads of 'the nine dragons of the air' (Wieger, *Les Vies chinoises du Bouddha*, p. 15), gazing down on Buddha open-mouthed. Descent of water is not actually represented. Five women stand round, one holding towel.

Scene 2, considerably broken, represents the *Seven Steps.* The child steps forward with air of difficulty but determination, L. arm stretched upwards, while four women bend over him in surprise and adoration, and blue and white lotuses appear at his feet. On L. appears a fifth woman, and a man in secular Chin. dress, perhaps intended for donor and his wife.

Style of work throughout purely Chinese, as are also all details of dress, hair-dressing, etc. The women wear long-sleeved jackets, and trailing skirts fastened under arms in colour red, orange, yellow, dull blue, and purple. Their faces and hands painted white, their hair black, done in large backward-falling top-knot, or small forked one, at corner of head. Buddha has the fig. of baby and is naked; painted white with light blue for hair, like infants in large Maṇḍalas. Background greyish green sprinkled with small plants. At top, above the Seven Ratna, a festooned valance of slate-blue, sprinkled with flowers. Yellow cartouches (blank) are placed on alternate edges at side of each group.

For other representations of both scenes see Ch. xxii. 0035; for Seven Steps, Ch. lv. 0010. $2' \, 2\frac{1}{2}'' \times 7\frac{1}{2}''$. Pl. LXXIV.

Ch. 00115. Painted silk banner, fragmentary, all accessories lost, showing main part of standing *Buddha.* Head and most of R. side completely gone. Hands held up on each side before breast, palms out. Dress: straight green under-robe with red border reaching to ankles, and brown mantle with yellow lining, falling half-way below knee, the ends enveloping L. shoulder and arm and a corner also drawn over R. shoulder. Single lotus underfoot, lost but for green centre. Rough work. $1' \, 2\frac{1}{2}'' \times 7\frac{1}{4}''$.

Ch. 00116. Fr. of painted silk banner on rather coarse gauze. All accessories lost.

Subject: *Bodhisattva,* upper half only, standing $\frac{3}{4}$ to L. Head erect; R. hand laid across breast; L. arm by side, hand lost. Fig., dress, and jewellery of 'Indian' Bodhisattva type (see Ch. lv. 004, etc.), but face of more usual 'Chinese Buddhist' variety with finely arched eyebrows, high nose, and oblique eyes. Tiara has double circlet, second one surrounding base of top-knot, and ornamental metal loop or frame curving backwards from upper circlet, and apparently supporting top-knot in much the same way as in Ch. i. 002; but here higher on head and incomplete.

Surface much worn; colour remaining consists only of dense black on hair and scarf, light green on halo and stole, and dark reddish brown picked out with yellow on all jewellery. $5\frac{3}{4}'' \times 5\frac{3}{4}''$.

Ch. 00117. Two frs. of painted silk banner showing tusked demon under feet of Lokapāla. Replica of Ch. 0022. Upper part fairly preserved, lower torn.

Length $2\frac{1}{4}''$ and $3\frac{5}{8}''$, width $6\frac{1}{2}''$. Pl. LXXXV.

Ch. 00118. Triangular fr. of figured silk, made of two pieces joined. Backed with fine plain buff silk gauze, and showing remains of maroon silk border. Prob. head-piece of banner. Weave a variation of 'warp rib', *not* twill; fine weaving. Design (see below), white on maroon ground, is in two planes. Upper plane an open arcading

White on Maroon

across the material, the arches of flattened curve joining each other in smaller reverse curve. This rests on short shaft composed of Chinese fret supported by grotesque horned mask which forms crown or keystone of arch in next row of arcading. Arches composed of plain bands of alternate light and dark, carrying double band of spiral wave scroll (cloud).

Lower plane a broad 'all-over' ogee, synchronizing with arcading of upper plane in such a way that the fusion of the sides of adjoining ogees occurs in centre of each archway, the curves of the ogees passing below the haunches of the arches most agreeably. Fusion of opposing ogees ingenious. Two descending curves are brought together and open again into ring-like loop, which is passed over corresponding loop formed by ascending lower curves, the two being locked in reef-knot. In upper spandrel between diverging curves of ogee and intrados of arch, a ring. In corresponding space below, between curves of ogee and haunches of two adjoining arches, a palmette growing downwards from two ogee curves.

Right and left of centre formed by fusion of ogees, and filling the space of each arch, two pairs of confronting beasts, one pair above other. In one row of arcading, pair of griffins and pair of wyverns, and in next row, pair of griffins and pair of lions; this alternation is constant. In each case the griffins are above, and their tails curve into light band forming lower edge of arch containing them.

Fabric distinguished from all others from Ch'ien-fo-tung, both by pattern and manner of weave; but the latter found again in T. xv. a. iii. 0010. a and T. xxii. c. 0010. a (Pls. LV, CXVIII) where pattern suggests a distant resemblance in style also. See above, pp. 911 sq.; also *Burlington Magazine*, 1920, August. Fairly preserved. Gr. M. 9¾". Pl. CXI, and design, p. 963.

Ch. 00119. Fr. of silk embroidery. On terra-cotta silk gauze of open plain weave, trailing sprays of leaves and flowers are worked in bands of dark blue, green, China blue, pale blue, cream, and terra-cotta. Work gives effect of block shading in satin-stitch, but stitch is not true satin-stitch of Ch. 0075, where each stitch starts from same side of leaf as the one before. Here stitches start alternately on opposite sides, and effect behind is of a small running stitch outlining design. This stitch gives same effect on right side as satin-stitch, besides saving silk and weight, and is the one most used in embroidery frs. in Collection. Rather rough work. Torn. 1′ 7½″ × 5″.

Ch. 00121. Silk painting representing *Avalokiteśvara* seated, with Lokapāla attendants. Lower quarter lost; remainder somewhat broken about top; flowery band painted round edge in imitation of painted silk border, and outer border (originally) of plain brown silk. A specially fine example of Indian tradition as preserved in Chinese Buddhist painting.

Avalok. seated on wide flat Padmāsana in attitude of 'royal ease'; R. knee raised with R. hand hanging open over it, thumb and first finger joined; L. knee, hand, and lower leg lost, but evidently at knee holding long spray of purple lotus which rises beside head. Dhyāni-buddha on front of tiara. Body slender-waisted, leaning towards L. shoulder; limbs long, slim, and somewhat angular in pose; head erect; face young and clean-shaven with serene expression and downcast eyes, slightly oblique, with finely curved upper and under lids.

Dress of regular Indian Bodhisattva type, consisting of *laṅgōṭī*, over which thin skirt, uncoloured, hanging about leg and ankle but revealing contours. No stole or arms but narrow scarf entwined on breast; shoulder draperies; jewellery consisting of bracelets, anklets, narrow girdle, necklace, armlets with high arm-shield, ear-rings, and three-leaved tiara orn. with purple and yellow lotuses. Hair done in high cone, and otherwise seen only in smooth band round forehead. Circular vesica and oval pointed halo; draped canopy. In upper corners unobtrusive figs. of Virūpākṣa (L.) and Vaiśravaṇa (R.), in mail armour as in silk banners, seated on rocks. The two other Lokapālas may have been in bottom corners. Feathery floral sprays, in style of Ch. printed silk patterns, scattered on background.

Colouring slight and perhaps unfinished, consisting chiefly of crimson on short *laṅgōṭī* and canopy, crimson and green on scarf, pale blue and green on halo and vesica, and touches of dull yellow and purple on armlets and lotuses. Flesh and skirt uncoloured, hair only pale grey, and jewellery (apart from armlets) dull white, perhaps ground for subsequent colour. Drawing of ease and distinction, thrown into prominence by simplicity of fig. and scarcity of colour.

For other Avaloks. of Indian type, in this pose, see Ch. xxii. 0017; xxvi. 001; lv. 003 and 0024; and cf. Ch. 00157, 00221; xx. 005; lvi. 0015. 1′ 8″ (incomplete) × 1′ 9″. *Thousand Buddhas*, Pl. XLIII.

Ch. 00122. Paper painting of youthful *Buddha*, orig. pasted on fr. of MS. Ch. 1382. Seated in meditation on Padmāsana with spreading base and top; hands and feet hidden; face round and childish with ingenuous expression. Red mantle covers both arms; behind are circular vesica (greenish brown) and halo (maroon, red, and yellow). Buddha's lips and base of Padmāsana are red, but remainder uncoloured. The drawing has much charm and delicacy, but is somewhat torn. 4⅞″ × 3½″. As pasted on MS. 9½″ × 5½″.

Ch. 00124. Silk painting representing *Two-armed Avalokiteśvara* (Kuan-yin) seated, with attendants and donors. Painting considerably broken and surface worn; border of dark purple linen with suspension loops of red and yellow silk complete; but linen on lower edge replaced by purple silk damask with rosette pattern.

Avalok. sits with legs in adamantine pose on lotus with scarlet and purple-tipped petals; R. hand in *vitarka-mudrā* at breast, holding long-stemmed scarlet and white lotus between finger and thumb; L. supporting flask at shoulder level; Dhyāni-buddha on front of tiara.

Fig., dress, jewellery, vesica, halo, and canopy much as in Ch. 00167, but drawing less certain and colouring mostly lost. Latter consisted chiefly of scarlet and slate-blue with pale yellow on orns. and some dull olive-green on halo and lotus centre. No flame border on vesica; Bodhisattva's hair slate-blue, and flesh shaded only with pale pink. Flask

a stoppered one of usual shape with short spout seen from front but without orn. and painted also blue.

On either side below stands a man holding roll of paper. These wear Chin. official dress—long wide-sleeved scarlet jackets and white under-robes standing up round neck and trailing on ground about their feet. Their coiffure is unusual, hair being done on top of head in two blunt upright horns, slightly concave in front, and topped by gold boss orns.; round base of each horn is tied a red band, and from same point stands out horizontally long sq.-headed prong with boss orn. at head. Figs. are unhaloed, but prob. represent the Good and the Evil Genius represented under this guise in Ch. lvii. 004, where their identity is established by inscr. Blank cartouche for inscr. in L. upper corner and on R. of central fig.

Donors below kneel on either side of central panel (blank) for dedicatory inscr., two monks on R., two nuns on L. Monks wear crimson and yellow under-robes, and black mantles lined with same colours covering L. shoulder; their shaven heads are painted black. Nuns seem to wear women's girdle and under-bodice crossed over on breast, with olive-green robe over this, and on top wide-sleeved black coat, lined with crimson and covering feet; but exact make of their garments is not clear. Their faces, however, are painted white (mostly lost) with vivid red cheeks characteristic of women in these paintings. Their features are soft and rounded though of monkish cast, and their shaven heads are painted light blue; cf. Ch. xlvi. 0014. The foremost donors hold resp. censer and flask, and those behind scarlet lotuses on platters. Blank cartouche for inscr. is placed before each. 2′ 11″ × 2′ 3½″.

Ch. 00125. Linen painting representing the single-headed and *Six-armed Avalokiteśvara* (Kuan-yin), standing, with two small attendants, and donors. No border; in fair condition.

A. stands facing spectator; upper hands raised holding the discs of Sun and Moon (moon on R. showing tree, frog, and hare, sun on L. with phoenix; see *Ch. 00102); middle hands in *vitarka-mudrā* on either side of breast with willow spray between finger and thumb of each; lower hands by sides, R. holding rosary, L. flask with mottled porcelain body and metal neck and foot. Dhyāni-buddha on front of tiara. General type of fig. and workmanship as descr. in *Ch. 0052, q.v. for other examples. Tight flowered over-skirt; halo of waving rays of light.

At feet, on either side, stands small fig. of child in long white trousers, crimson tunic, and short black jacket, with long tight sleeves, white lapels turned back on breast and white band tying it at waist. Hair of these figs. hangs in bunchy black mass to shoulders and is tied with a red bow over forehead. Cf. for coiffure, child donors in Ch. lvii. 004.

These children may represent the Good and the Evil Genius; see above, p. 868; cf. also Ch. lvii. 004. Colouring chiefly crimson, light green, orange, and yellow. Blank yellow cartouche for inscr. to L. of head.

At bottom six donors, standing, almost effaced; three men on L., one man and two women on R.; all in tenth-century dress of donors in *Ch. 00102, etc. 4′ 8″ × 1′ 9″.

Ch. 00126. Linen painting representing *Avalokiteśvara* standing, with donors. No border; fair condition, but lower half badly scorched.

A. stands facing spectator; R. hand raised holding attenuated willow spray, L. by side, carrying flask with decorated porcelain body and metal neck and foot. Dhyāni-buddha on front of tiara. Fig., dress, and general treatment as in preceding and *Ch. 0052, *q.v.* for other examples. Oblique eyes; tight flowered over-skirt, chains, etc., profusely orn. with jewels in lotus settings. Halo orn. with ring of pattern of 'enclosed palmette' type. Colouring chiefly crimson, light green, yellow, and grey. Blank yellow cartouche for inscr. to R. of head.

Donors, almost effaced, appear to have consisted of two men kneeling on L., with man-servant (?) below, and nun and lady on R. Dress as in donors of *Ch. 00102, etc. 4′ 11″ × 1′ 8¼″.

Ch. 00127. Linen painting with Chin. inscr., showing the single-headed and *Six-armed Avalokiteśvara*, standing, with donors. Almost effaced; but pose, emblems, and general type of fig. and dress as in Ch. 00125, though more carefully drawn and without attendants. For other examples, see *Ch. 0052. Donors at bottom consist of three men, standing, on R., and three women, standing, on L.; all in dress of donors of *Ch. 00102, etc. Inscriptions, also almost effaced, consist of salutation to Kuan-yin (?) in L. top corner, and one l. before each donor. 3′ 10″ × 1′ 9½″.

Ch. 00128. Linen painting representing *Avalokiteśvara*, standing. No border; paint much gone; lower end and R. side badly discoloured. Pose and emblems as in *Ch. 0052, but fig., dress, and coiffure of Chinese Buddhist type (as in *Ch. 002). Only remains of colour, light red on stole and skirt. Good workmanship. Cf. other paintings enumerated under *Ch. 0052. 5′ 7″ × 2′ 10″.

Ch. 00129. Linen painting representing *Avalokiteśvara*, standing, with donors. No border; linen suspension loops at top; poor condition, with large patch of discoloration. Fig., pose, dress, coiffure, and emblems as in *Ch. 0052, but finer workmanship. Remains of colour, crimson, light green, and yellow. Donors: two men on R., two women on L., in dress of donors of *Ch. 00102, etc. 5′ 2½″ × 1′ 10″.

Ch. 00130. Linen painting showing fig. (almost effaced) of *Avalokiteśvara*, standing. Fig., dress, pose, etc., as in *Ch. 0052. No border; linen suspension loops at top. 5′ 5″ × 1′ 9″.

Ch. 00131. Linen painting with Chin. inscr., representing the *Six-armed Avalokiteśvara* seated, with attendants and donors. No sewn border, but painted lozenge border enclosing picture; intact, but colour much faded. General arrangement of picture, figs., accessories, and treatment, as in the silk paintings descr. under *Ch. 00102; donors of same type.

Attendants here number only six: four kneeling Bodhisattvas in corners, and at sides, on R. the Sage, on L. Nymph of Virtue, as in paintings of Thousand-armed Avalok. and in

Ch. 00105. Colouring crimson, olive-green, and black. Donors: two men and child on R., two women on L. Inscr. (two chars. only) on cartouches above child; other cartouches and panel for dedication, blank. 4′ 3″ × 2′ 7″.

Ch. 00132. Large painting on fine linen, representing *Buddha* and attendants. Almost completely effaced; traces of central Buddha still distinguishable, and of large Bodhisattva standing on either side. 5′ 1″ × 3′ 8″.

Ch. 00133. Painted linen banner, with streamers and head-piece border of brown linen, showing *Avalokiteśvara* standing ¾ R., with hands in adoration. See descr. of type, and list of similar banners, under *Ch. i. 0016. Poor drawing and workmanship. Painting 1′ 9½″ × 10½″, length of whole 4′ 3″.

Ch. 00134. Painted linen banner, with head-piece border of bright pink linen, and streamers of dark green; good condition and colouring fresh.

Subject: *Avalokiteśvara* (?) standing ¾ L. with hands in adoration; crude style. For descr. of type, and similar banners, see *Ch. i. 0016. Painting 3′ 1½″ × 10″, length of whole 7′ 7″.

Ch. 00135. Linen banner; large size, of bright pink linen, with head-piece of cream-coloured linen bordered with pink, and bottom streamers of dull blue. Side streamers lost; good condition.

Subject, drawn only, not painted: *Bodhisattva*, standing facing spectator; R. hand in *vitarka-mudrā* at breast, L. below it holding stemless lotus bud in palm. Dress, coiffure, and type of fig. as in linen painting *Ch. 0052, etc. Short-legged ill-proportioned fig., but fair workmanship. Hair painted in black, and eyeballs white. Picture 3′ 1½″ × 10½″, length of whole 6′ 4″.

Ch. 00136. Painted linen banner, with Chin. inscr., retaining head-piece border of pink linen; streamers lost; good condition and colouring fresh.

Subject: *Avalokiteśvara* (on authority of inscr. which consists of salutation to Kuan-yin). Practically replica of *Ch. i. 0016, q.v. for description of type and list of similar paintings. Colouring dark pink, dark grey, and greenish brown. Painting 3′ 3½″ × 7″, length with head-piece 3′ 10″.

Ch. 00137. Painted linen banner, with head-piece border of pink linen; streamers lost; fair condition.

Subject: *Avalokiteśvara* (?), standing ¾ R. with hands in adoration. For description of type, and list of similar banners, see *Ch. i. 0016. Poor workmanship. Colouring red, dark grey, and dull green, clean and fresh. Painting 2′ 3″ × 6¾″, length with head-piece 2′ 10″.

Ch. 00138. Miniature painted linen canopy. Square of buff linen with red linen loop in middle of top side; on under side are painted two Buddhas seated in meditation on lotuses, each occupying one half (diagonally) of square. For others, see Ch. 00381. 11½″ sq.

Ch. 00139. Painted linen banner, with head-piece border, and side streamers of brown linen. Torn.

Subject: *Bodhisattva*; standing facing spectator; R. hand in *vitarka-mudrā* at breast, L. below it, horizontal, palm downwards. Dress, coiffure, etc., of 'Chinese Buddhist' type as in *Ch. 002. Colouring red and yellowish brown. For replica, see Ch. xxiii. 007; for workmanship generally, see note under *Ch. i. 0016. 3′ 1″ (with head-piece) × 6″.

Ch. 00140. Painted linen banner, with head-piece border and remains of streamers of light buff linen. Painting worn and faded, but practically intact.

Subject: *Bodhisattva*, standing ¾ L.; R. hand raised holding up lotus; L. horizontal at breast, back uppermost, fingers half curled up. Dress, coiffure, etc., in 'Chinese Buddhist' style of *Ch. 002; but banner a companion to the more 'Indian' Ch. xxiii. 006. Same drawing and colour; similar material, accessories, decorative halo, and valance bands over head. Painting 2′ 2″ × 6¾″, length of whole 3′ 3″.

Ch. 00141. Painted linen banner, with separate head-piece of close-woven cream-coloured linen edged with brown linen, and remains of brown linen streamers. Linen forming latter and main part of banner is of exceptionally thin open texture. Painting dirty and in poor condition.

Subject: *Avalokiteśvara* (?), standing ¾ R. with hands in adoration. Long body, and short legs. Dingy colouring of dark red, green, and grey. Lotus underfoot grows on top of long straight stalk, which fills up miscalculated space to bottom of picture. Poor workmanship. For descr. of type of fig., and list of similar banners, see under *Ch. i. 0016. Painting 2′ 11″ × 8½″, length of whole 4′ 4″.

Ch. 00142. Part of painted silk banner, darkened in colour but almost intact, showing upper half of *Bodhisattva* in mantle, with hands clasped, ¾ L. Replica of Ch. lv. 006, in colour and line, except for minor details of jewellery and canopy. 11½″ × 6¾″. Pl. LXXXI.

Ch. 00143. Paper scroll containing drawings of *pairs of hands in mystic poses* and some Bodhisattvas illustrating attitudes of arms. Pairs of hands number thirty-eight, Bodhisattvas eleven; drawing of figs. following Indian tradition, but rude. Poses of hands all different, without explanatory inscriptions. Six most usual *mudrās*: *dharmacakra*, *vitarka*, *vara*, *abhaya*, *dhyāna*, and *bhūmisparśa*, not represented.

Poses also of arms of some of Bodhisattvas are curious; one stands with L. arm raised and hand drooping by head; another holds a flask in L. hand and touches top of head with R.; another holds both forefingers level along eyebrows; fourth holds both his hands almost touching above his head, in attitude found in many of Thousand-armed Avalokiteśvaras and sometimes supporting Dhyāni-buddha (see Ch. xl. 007). Eleven inches at one end of scroll are blank; paper ruled with faint borders and cross-lines at intervals of ¾″, as for MS. 4′ 8″ × 6¼″. Pl. XCVIII.

Ch. 00144. Paper scroll covered with rough sketches of Buddhist subjects, prob. designs for larger compositions. Scroll consists of three sheets pasted end to end and covered each side with sketches or with Chin. writing; but

direction of scenes or writing (i. e. as regards top and bottom of paper) is not uniform on either side. Scenes are as follows, from R. to L.:

Obv. (1) Haloed divinities within walled city, perhaps representing a Paradise, having two-storied gate-tower with double door, and watch-tower at corner. Outside on R., soldiers; and in front advancing to soldiers, string of civilians with hands in adoration.

(2) Bodhisattva on sitting platform, R. hand in *vitarka-mudrā*, L. holding sceptre, with host of seated Bodhisattvas behind and altars in front. Beyond altar a demon, brandishing bow or other weapon.

(3) Upside down in relation to preceding. On R. man with sword, and small tower, outside which stands another man apparently in altercation with him. On L. personage in official or magisterial robes advancing towards tower, while man with stick grasps him from behind, and another threatens him with his fists in front. He appears to deprecate their interference.

Rev. On R. (4) Medley of small scenes or groups, prob. practice-sketches for side-scenes of paintings. Many represent a woman kneeling in worship before shrine; an infant rising in lotus bud; three-tiered umbrella; tank; Buddha; Bodhisattva; tank with lotus, cloud, etc. Cf. Queen Vaidehī in side-scenes of *Ch. 0051, etc. In middle an altar supporting three circular objects perhaps representing Three Jewels. Other groups include man seated by hut and man on horseback with hawk on wrist pursuing hare (cf. Ajātaśatru legend in L. side-scenes of Ch. 00216); also two men haling off third by hair with his hands tied behind him (cf. scenes of judgement in Ch. cii. 001, etc.), and other groups of disputing or worshipping figs.

(5) Sheet of Chin. manuscript, 19 ll., partly obliterated at foot by dirt.

(6) On L. bearded dignitary, unhaloed, seated on canopied throne, behind altar bearing offerings, L. hand uplifted as in blessing. Beyond him priest and Bodhisattva also unhaloed, and in sky swarm of small divinities on cloud. On R., priest and Bodhisattvas approaching altar with offerings, etc. Foremost Bodhisattva kneels clasping bowl of small round objects, perhaps rice, and Bodhisattva behind empties out bowl of similar contents in high pile. For last fig. in particular, also for bearded dignitary under canopy in this scene, and for scenes (1) and (2) on obv., cf. similar groups in large silk painting Ch. 00350.

Drawing of roughest throughout. 1′ × 4′ 2″. Pls. XCV, XCVII.

Ch. 00145. Drawing on paper of *monk* seated in meditation on mat. In front lie his shoes, with upcurled toes. In background on L. stands stoppered vase with ovoid body, narrow neck, spreading mouth and foot, and appliqué handle or ear on shoulder; on R. thorn tree on which hang his wallet and rosary. The former resembles felt pouch, M. I. xiii. 001. a. Monk wears under-robe and mantle, covering both shoulders and arms, has shaven head, rather long from crown to chin, with large somewhat straight features, and firm expression. Drawing fine; in good condition. 1′ 6¼″ × 11¾″. Pl. XCVII. *Thousand Buddhas*, Pl. XXXII.

Ch. 00146. Drawing on paper showing rough *studies for hands of Avalokiteśvara* in various poses or holding emblems. Cf. Ch. lvi. 0014, etc. Few drawn on rev., on which also three disconnected lines of Chin. chars., almost effaced. Sketches on obv. show pair of hands in *vitarka-mudrā* side by side; pair in adoration; pair facing each other, but turned downwards with thumb and second finger in each joined, third finger bent, first and fourth extended; and single hands holding flask (2), dagger or sword (2), halberd, skull-headed mace, conch-shell, beggar's staff, seated Buddha, buckler, Pōthī, diamond club, divining arrow (?), noose, fly-whisk, Stūpa, mirror (?), Vajra, Ghaṇṭā or Vajra-topped bell, bunch of grapes, sacred book (roll), sq. emblem engraved with Svastika, sacred grass (see Waddell, *Buddhism of Tibet*, p. 394), Chin. coin, set square, bow, rice (?) falling from an open hand, elliptical loop-shaped object passed over fore-finger, and bowl.

On rev. pair of hands holding up empty discs (of Sun and Moon) and single hands holding cloud, flaming jewel, lotus bud, and miniature canopy on point of forefinger. Drawing rough and uneven; condition good. 1′ 6″ × 11¾″. Pl. XCVII; *Thousand Buddhas*, Pl. XXXII.

Ch. 00147. Drawing on paper of *lion* in Chinese style. Stands striding, ¾ L., mouth open roaring. Scroll-like orn. on back-legs and tail, like outline of leaf orn. in Ch. 00163. Vigorous work drawn with heavy brush. Good condition. 1′ 4⅝″ × 11⅝″. Pl. XCVII.

Ch. 00148. Paper picture of shrines cut out in open work in buff paper, and pasted on another blackened sheet. Large hexagonal shrine stands in middle in front and three smaller ones above. All have stepped or sloping bases, and concave roofs with upturned eaves, and a crescent on top with short ringed pinnacle rising between its horns. From base of pinnacle eaves are stretched chains hung with bells. On roof of large shrine are represented two monkeys (?) joining hands. Towards it leaps up a unicorn (?), the long mane (?) curling over its back; another on R. is lost except for head. In front of this shrine again stand a pair of confronting phoenixes, with pigeon behind each. Birds and animals cut out in buff paper and pasted on like shrines. For other picture of the kind, see Ch. 00423, and cf. Ch. 00425. 1′ 4½″ × 11¾″. Pl. XCVII.

Ch. 00149. a–f. Six artificial paper flowers; (*a–e*) cut out and pasted together as Ch. 0077; (*f*) on single sq. of paper. (*c–e*) elaborate. Diam. 3¼″ to 5″. *a, b*. Pl. XCII.

Ch. 00150. Paper painting, over which Ch. 00150. a, b were pasted. Subject non-Buddhist, perhaps giving of first written characters by the horse-dragon to Fu-hsi (see W. F. Mayers, *Chinese Reader's Manual*, p. 48). The horse-dragon kneels ¾ to R. with open jaws; before him stands bearded man, smiling, with tablet in L. hand and brush in R., in act of writing. He wears white-sleeved under-robe, long pink mantle, and sq. black head-dress with projecting sq. orn. (?) in front. Back of his fig. has been cut off in adaptation of painting as a mount for woodcuts. A branching column of flame rises from tablet, and others

stream from dragon's head and wings. He has red snake's body, horse's forelegs, and conventional lion-like head with voluminous upstanding mane out of which rise three sharp pointed objects like mountain peaks. Between him and man lies string of Chin. coins strung on red band. Their meaning is uncertain unless Fu-hsi is also here credited with invention of coins. Condition good. 1′ 5¾″ × 1′ 2¼″. *Thousand Buddhas*, Pl. XXXIII.

Ch. 00150. a–d. Four woodcuts on paper, from same block, showing Chin. text and fig. of *Avalokiteśvara* (Kuan-yin), seated on lotus within circle and holding half-open lotus at breast. Dress and orns. of Indian Bodhisattva; high six-leaved crown; circular halo and vesica, flame-edged. Circle containing fig. placed at top of sheet, with narrow inscr. cartouche on each side standing on smaller lotus, and flowers in air above. Cartouche on R. contains salutation to Avalok.; that on L., dedication. Lower part of sheet filled with 14 ll. Chin. containing prayer. Double-line border round whole. Block finely cut.

(*a*) and (*b*) were found pasted over paper painting Ch. 00150. Picture half of (*a*) delicately coloured by hand, fig. and accessories in pink, light blue, light red, green, and yellow; cartouches yellow with red borders. Whole sheet mounted in Kakemono fashion on blue patterned paper. Pattern, printed in darker blue, consists of repeating four-petalled rosettes, placed diagonally, and touching each other at all four extremities so as to enclose octagonal spaces in which are lozenges. (*b*), (*c*), and (*d*) uncoloured, (*d*) sand-encrusted. 10⅝″ × 6⅝″, (*a*) with mount 1′ 3¾″ × 6⅝″. (*a*) and (*b*) Pl. CI.

Ch. 00151. a–s. Woodcuts on paper, from same design, showing Chin. text and fig. of *Mañjuśrī* on lion with two attendants. Arranged as in Ch. 00150. a–d. Lion ¾ to L., standing on lotuses upon clouds, with head turned back to R. M. facing spectator; L. leg pendent, R. invisible; R. hand raised holding fig.'s sceptre (?). Dress apparently long robe, girt close to body with belts in Lokapāla fashion, and with sleeves to elbows ending in frills over lower sleeve; but no armour. High stiff head-dress, cylindrical or hexagonal. Circular flame-edged halo and vesica, from which rays stream outwards. Attendants consist of boy half-clad, bending with hands in adoration on L., and groom leading lion on R. Latter not half-naked Indian as in silk paintings Ch. 0023, etc., but bearded man in belted coat, breeches, top-boots, and high turban with puggaree falling on neck. Salutation on R., dedication on L.; prayer in 13 ll. Chin. below.

Alongside (*a*) was pasted Ch. 00151. t; (*d*) mounted on larger sheet of paper forming border; (*c*) two prints pasted side by side, one much torn; (*h*) L. half lost; (*j*) mounted on second sheet and with paper border; (*o*) mounted on larger sheet; (*p*) picture-half only, mounted Kakemono fashion on yellow paper, with red string for suspension; (*q*) remains of three, picture-half only, pasted side by side; (*r*) remains of two, pasted side by side.

Two blocks have been used, the better-cut showing only part of M.'s halo, the worse showing whole. (*a*), (*d*), (*j*) and (*p*) are prints of former; remainder prints of latter; impression unequal in both cases. For other prints from same design, see Ch. 00204. Blocks 10⅜″ × 6½″ and 10⅞″ × 6¾″. *a*. Pl. XCIX.

Ch. 00151. t. Woodcut on paper, with Skr. and Chin. text and small fig. of *Avalokiteśvara* (Kuan-yin) seated on lotus within circle. Found pasted to side of Ch. 00151. a. Avalok. seated cross-legged, with hands together at breast, tips of fingers interlocked and turned inwards; Dhyāni-buddha on front of high crown; 'Indian' Bodhisattva's dress and orns. Round circle are printed three rings of Skr. chars., and round this again square formed of 2 ll. Skr. In spandrels between circular and rectang. lines of chars. are lotuses, over each of which is printed in larger size mystic Skr. character. On L. three columns Chin. Whole enclosed within double border. Cf. Ch. 00152. 5⅜″ × 6¾″. Pl. XCIX.

Ch. 00152. Woodcut on paper, with Skr. and Chin. text, containing in middle small fig. of *Amitābha-buddha* seated in meditation within circle enclosed in square. Round square run 4 ll. Skr. containing charm, and on L. are four columns Chin. 5⅜″ × 6½″. Pl. XCIX.

Ch. 00153. Drawing on paper, showing *pair of hands*, set upright on flat lotus, with Chin. inscr. indicating significance of each finger in Buddhist symbolism, and element to which each corresponds. These latter, beginning with thumb, are: The heavenly spaces, air, fire, water, and earth. Drawing in Chinese style. Soft yellow paper. Good condition. 11½″ × 1′ 4″. Pl. XCIX.

Ch. 00154. Woodcut on paper, showing two figs. of *Buddha* seated on lotus under canopy, with circular halo and vesica. Legs interlocked; R. hand in *vitarka-mudrā*; L. hand (in fig. on L.) in *bhūmisparśa-mudrā*, (in fig. on R.) horizontal at breast with palm uppermost. Coarse work. 11⅝″ × 1′ 7⅝″. (Fig. on L.) Pl. XCIX.

Ch. 00155. Drawing on paper, showing four *Bodhisattvas*, upper pair standing, lower pair seated on lotus pedestals. Bvas. in each pair are turned towards each other, those above holding rosaries in inner hands, those below respectively Vajra and lotus. Outer hands of lower pair are in their laps; that of upper Bva. on R. holds lotus bud; the other's hangs by side with first three fingers doubled up. Dress in Indian Bodhisattva style, drawn with little detail. Work of no outstanding character. Good condition. 11⅛″ × 5⅛″. Pl. XCIX.

Ch. 00156. Drawings on paper of four demonic *Vajrapāṇis*, two on obv. and two on rev. All of grotesque type, standing on rocks, with legs apart and arms brandishing Vajra or thrust out in violent anger. Dress and general style as in silk banners, Ch. 004, etc. Cartouche for inscr. beside each, blank. Paper (buff) exceptionally stout and firm. 8½″ × 11¼″. Pl. XCVIII.

Ch. 00157. Silk painting representing *Avalokiteśvara* (Kuan-yin) seated, without attendants. Complete, but rough work; painted over earlier subject; remains of paper border,

orn. with coarse floral pattern in red and grey, pasted round edge.

Avalok. sits on lotus with legs interlocked, each hand in *vitarka-mudrā* at breast. Face short and wide with very straight features; Dhyāni-buddha on front of tiara; halo and vesica circular, apparently without orns.; draped and jewelled canopy behind halo; large blank cartouches for inscr. in upper corners. Fig., dress, and jewellery treated generally as in Ch. 00221, which the painting much resembles in every way. Colouring consists now only of dark red and dull grey and green mingled on drapery, jewels, and canopy; from rest of picture (halo, vesica, fig. of Bodhisattva, and lotus) it has disappeared, except for mere traces of white and light red paint.

This allows drawing of picture underneath to be clearly seen. It shows two figs. well drawn: man, rather large scale, standing $\frac{3}{4}$ to L. upon mat and holding smoking censer, and boy attendant behind him carrying long-handled fan. Man's dress is that of donor figs. in *Ch. 00102, etc., while boy wears wide-sleeved jacket and long under-robe. Prob. donor group from picture of unusual size.

2′ 1½″ × 1′ 7″.

Ch. 00158. Woodcut on paper, showing Chin. text and fig. of *Vaiśravaṇa* with attendants. Date contained in text A.D. 947.

Three-fourths of sheet occupied by picture, which shows V. standing, face to spectator, on upturned hands of small fig. in armour, whose bust rises from clouds below. R. hand grasps staff of halberd with pennon; L. supports miniature shrine. Armour as in silk banners, type Ch. xxvi. a. 006; armour-scales round edged on body and shoulders, oblong on skirts of coat of mail; curved sword hanging in front; faces drawn on discs over breast. Of fig. under feet, arm-guards, elbow frills, and breastplate are visible. Both wear tiaras, not helmets. On R. stands young man holding out object (indistinguishable) in R. hand. He wears only *dhōtī* and tiger-skin cloak, tiger's mask covering his head, and fore-paws knotted under his chin. Behind him stands demon in tiger-skin breeches, holding up naked infant on palm of R. hand; on L. young woman in Chinese dress carrying dish of fruit or flowers. Small hillocks appear under her feet and those of boy; all attendants unhaloed. In L. upper corner cartouche with name and epithets of V.; below, 14 columns Chin. containing date as above.

Young woman with dish appears also as attendant on V. in Ch. 0018, 0031, and resembles 'Nymph of Virtue' attendant on Thousand-armed Avalok. in *Ch. 00223, etc. Young man with tiger-skin appears also as V.'s attendant in Ch. 0069, and hillocks underfoot seen in same painting. Demon holding up child found in two paintings—in fragmentary Ch. 00373, and amongst genii attendant on Bhaiṣajya-buddha in Paradise painting *Ch. lii. 003—but his significance uncertain. Attitude of child same as in Rebirth banners, Ch. lv. 0015, etc. For fig. on whose hands V. stands, cf. above, p. 871.

Good impression; discoloured. For other prints of same, see Ch. xxx. 002; xxxvi. 002.

Block 1′ 3½″ × 10⅜″. (Picture) Pl. C.

Ch. 00159. Large pounce of strong buff paper, showing *Amitābha* seated between Mahāsthāma and Avalokiteśvara and two haloed monks. All are seated cross-legged on Padmāsanas with clouds below, the divinities under canopies, monks under flowering trees; attendant figs. turned $\frac{3}{4}$ towards Buddha. Latter has his legs interlocked, R. hand in *vitarka-mudrā* at breast, L. hand clasping knee. Bodhisattvas, not individualized, hold lotus buds in their hands nearest Buddha; their other hands raised in *vitarka-mudrā*, their legs are partially unlocked. Monks, shaven and haloed, have their hands in adoration. Physical type of figs., dress, ornaments, haloes, canopies, etc., in 'Chinese Buddhist' style as in *Ch. 002, etc. Outlines of Amitābha and two figs. on his L. drawn in long lines of punctures; other two figs. pricked only. Good condition, except for few holes. 2′ 6″ × 4′ 6″. Pl. XCIV.

Ch. 00160. Paper painting representing *Buddha* with attendant Bodhisattvas. Buddha seated on lotus pedestal, legs interlocked with soles turned up, hands in *dharmacakra-mudrā*, R. arm and shoulder bare. Flesh opaque yellow, hair blue, mantle Indian red, circular halo and vesica of rings of blue, crimson, and copper-green, lotus pinkish white with red edges. The Bodhisattvas stand on either side; one with R. arm pendent, the other with R. hand in *vitarka-mudrā* at breast; both with L. hand at breast; hair black, flesh pink, skirts dull blue, scarves maroon and pink. Predominantly 'Indian' in character, but both drawing and colour considerably destroyed. 10″ × 7⅜″. Pl. XCII.

Ch. 00161. Drawing on fr. of thick buff paper ruled as for columns of Sūtra. Shows *Vaiśravaṇa* standing astride, facing spectator, on arm and hand of seated demon; Stūpa on R. hand and lance in L. Fig. long and thin, with a large head and very small hands and feet. Armour as in the more 'Indian' Lokapālas of the silk banners (see *Ch. 0010, *General Note*); but ornamental details and armour-scales not filled in, and prob. intended to be shown by painting. This has only been begun, lower border of coat of mail and leather flaps below hip-belt alone being coloured dark orange. Eyes of grotesque size and placed obliquely; three-leaved crown on head. Charred at bottom, but otherwise in good condition. 10⅜″ × 5½″. Pl. XCII.

Ch. 00162. Paper painting showing divinity riding on phoenix and carrying child; unhaloed; perhaps *Brahman* as Giver of Life. Companion paintings, forming series of Indian divinities, found in Ch. xvii. 002, 003; xxii. 0033, 0034.

Divinity sits with R. leg bent across, L. pendent; R. hand raised carrying death's-head mace, L. holding child at breast. Dress apparently long skirt and girdle of Bodhisattva, with tight-fitting sleeved red garment covering upper part of body and arms. Over latter a deep yoke or collar, metal-bound, as in dress of Lokapālas, Ch. lxi. 001, etc. Hair black, done in high top-knot, with white ribbon fillet tied round head. Flesh shaded with light red on buff of paper; ears elongated, with rings.

Child wears long yellow coat; his hair done in two

bunches on top of head (as in Ch. xxxvi. 001); on his outstretched R. hand is white globe. Phoenix boldly drawn, with crested pheasant head and strong upcurling wings of Sun-bird type. He has red-spotted body, yellow legs, and wings of dull green, terra-cotta, and grey-blue. Same colours used for Bva.'s dress and orns.

Yellow cartouche (blank) for inscr. in R. top corner. Condition good.

1′ 6¼″ × 1′ 0⅜″. Pl. XCI.

Ch. 00163. Paper painting with Chin. inscr. representing *Mañjuśrī* on white lion, led by attendant, and with donor (?) at side. General pose of group, style of Bodhisattva, accessories, etc., as in silk banners and large paintings (e.g. Ch. xxxviii. 004); but drawing comparatively lifeless, and painting rough. M. sits with L. leg pendent; R. hand raised with thumb and third finger joined, and first and second extended; L. hand carrying fungus sceptre. Most of flesh outlines are light red; hair and dress that of Bodhisattva of type *Ch. 002.

Lion standing with mouth open; white with red-spotted breast, toes, and backs of legs, and leaf-like orns. in dark pink on croup, tail, and fore-side of back-legs resembling carved orns. on Chinese jade beasts, etc. On L. fore-shoulder also curved red flame on wing-like orn. incompletely visible, but starting from spiral; traces of a more leaf-like orn. appear round L. shoulder. Attendant's flesh painted dark pink; he is placed high off ground, and represented as striding, though lion stands still. Whole group supported on pink clouds.

On L. edge stands (woman) donor on mat, dress and coiffure as in *Ch. 00102. On mat an infant kneels to her, naked except for red bow on hair and holding up hands in adoration with red lotus bud between.

Inscriptions placed on cartouche on R. edge, and (2 ll.) on another in L. upper corner.

Colouring only pink, orange-red, grey, and greenish brown, all dingy in hue; condition good; pin-holes in corners. 1′ 7¾″ × 11¾″. Pl. XCI.

Ch. 00164. Fr. of illustrated Chinese calendrical MS., setting forth the lucky and unlucky days for performing certain actions, etc. Punctuated in red. Contains diagram and two finely drawn illustrations. First shows above constellation of Plough, an altar in background; in foreground deity of constellation, in garb of Chinese magistrate, standing with attendant by his side, and man in coat and tailed cap kneeling with hands in adoration before him. Second, apparently unfinished, shows monkey on cloud (genius of one of planets), and Chinese magistrate standing as in the former picture.

MS. 2′ 3¾″ × 11½″; drawings 4″ × 2⅜″ and 3¼″ × 2⅜″. Pl. C.

Ch. 00165. a–b. Triangular head-piece and suspension loop of figured silk from banner. (*a*) Head-piece of large-patterned silk, white on buff ground. Loose satin weave like that of Ch. 0076. Fr. of pattern preserved shows large open flower and parts of blunt rounded leaves of character common in the Shōsōin (see *Shōsōin Catalogue*, i. Pl. 27, silver-work on mirror-box). Narrow border of plain buff silk, and frs. of streamers of thin dull brown. Broken cane strainer wound with variegated silk yarns, and broken top of silk painting sewn up to head-piece. H. 6″, base of triangle 1′ 1½″. Pl. CXII.

(*b*) Suspension loop from above of figured silk. Smooth supple satin twill, excellently woven; soft warp; part only of graceful design preserved. On dark myrtle-green ground are two rows of circular six-petalled rosettes, resp. pale pink and bright orange-red. Rosettes in each row spaced at about ½″; rows about 1″ apart, rosettes in one row corresponding to spaces in other.

Facing each of pale pink rosettes a pair of ducks, reversed about a small lozenge-shaped base, and prob. corresponding to another pair on the other side (not preserved). Line of ducks linked by twining garland which they hold in their bills, and which forks into leaves between each pair. Birds admirably life-like; woven in light green, yellow, and white, with myrtle-green eye and markings, and orange-red patch on breast and tail; garland in same colours. Rosettes have heart-shaped petals, outlined with white, and passing through pale pink or orange-red respectively to light yellow-brown, within which is central small myrtle-green heart outlined with white. Flower centre (not preserved) bounded by green circle with white spots. For connexion of design with others in Collection, also figured silks *6–8* of patchwork Ch. lv. 0028, see above, p. 906. Colours fresh. 8⅛″ × 2¼″ (unpicked). Pl. CVI.

Ch. 00166. Two frs. of silk tapestry, from same piece as strips on manuscript-roll cover Ch. xlviii. 001, but cleaner and showing additional colours (pink, heliotrope, and scarlet). For fuller descr., see Ch. xlviii. 001. 6⅜″ and 3½″ × ½″. Pl. CVI.

Ch. 00167. Silk painting with Chinese inscription, representing *Two-armed Avalokiteśvara* (Kuan-yin), seated, with attendant Bodhisattvas and donors. Date given by inscription prob. October 15, A.D. 922. Painting complete and in perfect condition, with 2″ border and suspension loops of puce-coloured silk. One corner of border replaced by band of good flower and bird embroidery, but from longer piece. Design in naturalistic Chinese style and worked in satin stitch in shaded greens, yellows, greys, blues, reds, and pinks, on dull sage-green gauze over plain silk of same colour, as in Ch. 00348, etc.

Avalok. sits on lotus of pinkish purple, with legs in 'enchanter's' pose (R. leg bent across, and L. pendent), R. hand in *vitarka-mudrā*, with long-stemmed scarlet and white lotus bud held between finger and thumb, L. hand on knee holding flask. On front of tiara large fig. of Dhyāni-buddha. He wears Indian arrangement of Bodhisattva dress like Eight-armed Avalok. in *Ch. 00102, and with same necklace of black beads; but drawing is by a light and thoroughly practised hand, and clumsiness of orig. type lost (see *Ch. lv. 0014).

Av.'s skirt is of light vermilion sprinkled with grey, white, and yellow flowers; girdle light green and white; scarf

across breast light crimson; stole light green with reverse of bluish grey; ornaments pale yellow hung with pear-shaped blue-grey and green jewels and relieved with scarlet lotus flowers; flesh uniform pinkish white, outlined with dark pink. Face round and plump with small features placed close together in middle; eyes straight, with straight under and curved upper lids, and red inner. Arched eyebrows and small moustaches and imperial drawn in green over black. These eyebrows are placed very high, and between them and eyes are another pair faintly drawn in pink over black. From this it seems that the Japanese custom, in Heian epoch, of shaving eyebrows and painting (?) others higher on forehead was derived from an existing Chinese fashion.

Vesica and halo are circular, painted in plain variegated rings of same colour as dress. Indian flame border is preserved, but has lost its significance, being painted round inner ring of vesica instead of outer edge. Canopy overhead is not of drapery but formed of three clusters of vermilion, white, and purple flowers and green leaves on conventional stems, hung with jewel drops, green, vermilion, and blue-grey. On either side infant floats down seated on purple cloud, with hands in adoration or offering lotuses and wearing only flying stole of vermilion and green.

The attendant Bodhisattvas are ranged above each other, three a side, turning towards central fig.; the two upper pairs with hands in adoration, and robes and hair in *Ch. 002 style; the lower pair kneeling on either side of altar offering dishes of scarlet lotuses, and wearing robes of 'Indian' fashion like Avalokiteśvara. Treatment and colouring of all resembles that of central fig. Altar shows a good example of draped valance like Ch. 00278. Colouring throughout remarkably fresh, but light and thin in tone. Chief colours are light vermilion of robes, white of flesh, green of stoles and accessories, blue-grey of background, and black of donors' robes below.

Donors stand three on either side of dedicatory panel, men on R., women on L. Their dress and head-gear are same in style and colour as those of donors of *Ch. 00102; but men's coats are seen here to reach to ground. Their skirts are dark pink and yellow; fashion of trousers or under-robe appearing below them (white striped with red) is not obvious. Women's skirts are dark grey and brown, their girdles and sleeve-bands white flowered with red and grey, their stoles pale ochre yellow. Their head orns. are exceedingly elaborate and painted white, except for floral part, which is gamboge.

The dedicatory panel contains 6 ll. Chin. inscr. well preserved, recording date, name of principal donor, a military officer of Tun-huang, and dedication for spiritual benefit of defunct parents; cf. Chavannes, App. *A*. V. B. Other inscriptions before each of donors and parents, one before each of kneeling Bodhisattvas, and a short salutation to Avalokiteśvara on flower-printed altar-cloth.

For other two-armed seated Avalokiteśvaras, with attendants, in corresponding style, see Ch. 00124, 00221; xxii. 0016; xlvi. 0014; lvii. 004; cf. also Ch. xx. 005. 3′ 4¼″ × 2′ 4¼″. Pl. LXI.

Ch. 00168. Nine frs. of figured silk in long narrow strips, and one broader. Weave, fine satin twill. Pattern: repeating flower spot, circular, *c.* 2½″ in diam., composed of rosette of six heart-shaped petals, surrounded by wreath of six similar flowers in profile, their centres on outer edge and their petals turned back towards middle of spot. A heart or trilobate shape in outline appears on outer edge between each of these profile flowers. Interspaces filled with lozenge-shaped spots, made of two pairs of confronting ducks and foliage reversed about short diagonal of the lozenge. Widest fr. shows only half of lozenges, as pattern breaks for beginning of new colour-scheme.

Above, a bronze ground with design in bright blue, golden yellow, green, and dull brown; below, ground pale pink, and design in myrtle-green, white, brown, and pale blue. Strips belonging to either scheme incomplete, so that width of respective bands cannot be determined. Colour well preserved. Birds and flowers in naturalistic Chinese style. Widest frs. 8¼″ × 1½″; strips 6″ to 1′ 5″ × ½″. Pl. LV and (reconstruction of design) Pl. CXVIII.

Ch. 00169. Border of head-piece to banner in figured silk. Weave, satin twill. Pattern: a lattice-work of cream-coloured bars on greyish-brown ground, centre of each lozenge filled by cream quatrefoil rosette, and crossing points of diagonals by cream square containing elliptical brown ring. Diagonals themselves striped crosswise with greyish brown. Through middle of each row of lozenges runs stripe alternately of light blue, green, and salmon-pink. Colouring delicate and well preserved. Length of sides 10¾″. Pl. LV.

Ch. 00170. Fr. of silk brocade, doubled and made into suspension loop; ends finished off in point with small silk tassels. Woven in small twill with very fine yarn; weft flat and untwisted. Pattern preserved shows two striped bands of colours, 13/16″ wide, one mainly red, other mainly green, bounded by bands of dull brown ¼″ wide. Outer stripes of red band are apricot pink, colour shading through scarlet and salmon-pink to yellow central line; outer stripes of green band dark greenish-blue, shading likewise to yellow through stripes of true green.

Into each band is worked a row of alternately six-petalled (large) and four-petalled (small) rosettes, those on red band being bright blue, and those on green (faded) pink; their centres and centre row of petals are in each case dark brown, but brown has almost completely disappeared from green band. Into the ¼″ brown dividing bands are worked triangular groups of white or yellow rings; triangles reversed alternately along edges.

Where lines of flowers are to be formed, second weft (blue, brown, or pink as the case may be) is used. This second weft carried along back of web unattached and brought into fabric only where a flower occurs, changing place with first weft which is taken to back. Neither, however, is interwoven with the warp. They pass loosely across it at back and front resp., and return to their orig. sides of fabric when enough space to form flower petal has been passed. The fabric thus not woven at all where these

flowers occur, but consists of three unrelated layers of threads, and the surface especially, therefore, much broken and worn. The white and yellow rings on brown bands formed in same way. Another example of same method seen in figured silk *3* of patchwork Ch. lv. 0028. See also other true brocades under Ch. 0065. Except in ornamental bands where these extra yarns occur, the fabric is a single cloth. Somewhat worn, but colours well preserved. 10" × 2⅛". Pl. LV.

Ch. 00171. Two strips of figured silk, woven in satin twill of close fine texture, with stiffened warp. Pattern: repeating 'spots' of conventional floral design, circular and lozenge-shaped in alternate rows, woven in white, warm brown, green, and dark blue on putty-grey ground. Circular spot formed of an octagon, containing at centre six-petalled rosette, and breaking at points into eight pairs of volutes, which support trilobate flower-shapes alternately green and dark blue. This spot is *c.* 1⅞" in diam., and set out in rows *c.* ⅜" apart horizontally. Vertical spacing cannot be seen from this fr. The four-armed spots in interspaces were apparently of like floral design, but only partly preserved here. Worn in places, but condition generally good.

A similar design, and more completely preserved, is found in the following: Ch. 00181; liv. 005 (bands), and figured silk *1* and printed silk *15* of patchwork Ch. lv. 0028.

It is also exceedingly common in the Shōsōin, both in silver-work and weaving, though there it is found in more elaborate forms. See *Shōsōin Catalogue*, i. Pls. 16 (hexagonal mirror), 31 (box for octagonal mirror), 35 (figured silk on mirror case); ii. Pls. 89 and 91 (silk covering arm-rest), 109 and 110 (silk of screen border). From the frequency of pattern in silver-work of undoubtedly Chinese workmanship, it is safe to infer that in woven examples also it is of Chinese manufacture.

A link with the West, geographically, is found at Khādalik, where, on two fresco fragments, Kha. i. C. 00107, 00119 (Pl. CXVI. A), remains of same eight-pointed star are found. Rosette at centre is here four-petalled, and buds alternate with pairs of volutes at tips of octagon; cf. above, p. 906.

00171. Lengths 1' 5" and 11¼", width 1⅝". Pl. CXI.

Ch. 00172. Triangular fr. of figured silk (three pieces joined), prob. from head-piece of banner. Woven in satin twill with fine warp and broad untwisted weft. Ground deep salmon-red; pattern dark blue (indigo) outlined with white, and yellow outlined with dark blue. Design composed of repeating groups of bird and flower forms, arranged on principle of repeating circles and lozenges, but with no formal boundary line for 'spots', so that they are transformed into an all-over pattern. For similar motifs, cf. above, p. 906, note 13.

Circular groups consist of four yellow ducks with outstretched necks, purely Chinese in character, flying inwards to common centre—a small blue ring. Lozenge groups formed of four round buds with trefoil heads radiating from common centre and separated from each other by (alternately) a leaf-like or stalk-like form also ending in trefoil. Leaves form the long diagonal, stalks the short diagonal of lozenge; whole in indigo outlined with white. Third fr. in corner is of same silk and weave, and similar but larger pattern. There remain only head and neck of duck in white, and leaf scrolls in green, all outlined with dark blue. H. 4", base of triangle 9". Pl. CXI.

Ch. 00173. Two strips of figured silk, with remains of paper backing, prob. from border of manuscript-roll cover like Ch. xlviii. 001. Weave, loose satin twill, with fine stiffened warp and broad untwisted weft. Pattern: rows of six-petalled rosettes, *c.* 1⅛" in diam. and $\frac{3}{16}$" apart, so set out that the spaces in one row correspond with rosette centre in the next. Rosettes in alternate rows of slightly different design, (*a*) having six narrow petals radiating from centre, with larger petals showing between their tips; (*b*) having large circular centre divided in four, and an outer ray of six short wide petals. Woven in light green, bright red-brown, bright blue, and putty-colour on cream ground, colours not forming individual petals but passing in straight stripes across flowers. No green in rows (*b*). Surface considerably dirtied and faded, reverse very fresh. 1' 3½" and 9¼" × 2¼". Pl. CXI (reverse of fabric).

Ch. 00174. a. Small triangular fr. of fine figured silk. Weave, satin twill; fine warp, weft broader, untwisted; firm texture. Pattern: apparently an intricate conventionalized design; carried out in white with touches of powder blue, golden yellow, and green on Indian red ground. Gr. M. 2⅜". Pl. CXI.

Ch. 00175. Four frs. of figured silk, like Ch. 0076 in weave, but firmer. Covered apparently with large naturalistic floral and bird pattern in leaf green, Indian red, old-rose, and deep yellow outlined with indigo on pure white ground, but no complete form preserved. Widest strip, however, shows section of well-drawn bird (duck?) in profile, with head turned over back, and spread wing. Head indigo outlined red, eye green outlined white; back green, wing red and pink, outlined indigo. Colours absolutely fresh. Gr. frs. 1' 1" × 1¼", and 1' 6" × $\frac{5}{16}$". Pl. CXI.

Ch. 00176. a–b. Two strips of figured silk. Weave, satin twill; fine stiffened warp, broad untwisted weft. Ground scarlet; pattern woven in indigo, light blue, pale pink, green, bright yellow, and white, but design irrecoverable. (*a*) shows section of lozenge (?) in indigo with yellow birds (?) outlined with red in field, small white discs outlined with red on border, and green leaves with white stems and outlines growing from angles (?); (*b*), perhaps from different fig. silk, shows part of repeating spots in same colours. Silk soft and lustrous, and colours perfectly fresh. (*a*) 8⅛" × $\frac{7}{16}$", (*b*) 8½" × ⅜". Pl. CXI.

Ch. 00177. a–b. Frs. of figured silk. Weave, satin twill; fine stiffened warp, broad untwisted weft; thick soft texture. Ground in both scarlet, and pattern fragmentary, especially in (*b*), but apparently woven chiefly in light green, lemon yellow, white, light blue, pale pink, and in (*a*) also in dark blue. Largest part of design visible in (*a*), where are shown eight leaf points converging towards common centre

—perhaps middle of large wheel pattern—and part of intricate floral pattern leading up to one of points. This part contains pair of white birds outlined with dark blue, perched amongst tendrils and leaves; slightly worn and faded. (*b*) three frs., may belong to same material, but design appears less naturalistic. Frs. preserved show rosette or heart-shaped forms, and parts of leaves (?). Very fresh and glossy. (*a*) $4\frac{1}{4}'' \times 1''$, (*b*) two frs. *c.* $\frac{1}{2}''$ sq. and strip $8\frac{1}{2}'' \times \frac{3}{16}''$. Pl. CXI.

Ch. 00178. Three frs. of figured silk, rather fine; weave, a close satin twill. Striking design of self-coloured crimson hearts set out in rows diagonally on golden yellow ground. Tips of hearts separated from body by narrow arched line of background and woven according to row in bright blue, rose-pink, or myrtle-green; but frs. too small to show complete sequence of these colours. Above break four white dots are woven in body of heart. Material soft, bright, and excellently preserved. Largest fr. $5'' \times 1\frac{3}{4}''$. Pl. CXI.

Ch. 00179. Misc. frs. of figured silk. Weave, satin twill; fine stiffened warp, flat untwisted weft. Ground strawberry red; into which are worked rows of repeating 'spots'. These are circular, $1\frac{3}{8}''$ in diam., and spaced about $1\frac{1}{4}''$ from each other horizontally. They are composed of two much conventionalized lions pursuing each other's tails, positions of animals being counterchanged in alternate spots. The rows appear from one strip to have occurred at intervals of about $2\frac{1}{4}''$ to $3\frac{1}{4}''$.

The lions have large sq. heads, gaping jaws, and upraised front paws; woven in white with red ears, yellow eyes and claws, and green manes and tails, all outlines being dark blue except of tails, which are yellow. On one fr. the lions are yellow, and the tails have white outlines. Circles of like kind are found in Ch. 00228 (brocade), 00358; i. 0022 (printed silks), and prob. also, though incomplete, in Ch. 00363, 00364. They are a characteristic type of Chinese pattern found not uncommonly amongst the designs of the Shōsōin (see *Shōsōin Catalogue*, i. Pls. 10 and 27, ii. Pl. 103); but there always composed of whirling birds. Chief fr. $9\frac{1}{8}'' \times \frac{1}{2}''$. Pls. CXI and (reconstruction of design) CXV.

Ch. 00180. Fr. of figured silk, thick and soft; weave, satin twill with fine stiffened warp and broad untwisted weft. Ground light Saxe blue. Pattern too fragmentary for reconstruction. In corner remains part of four-footed animal (lion?), woven in white with outlines of Indian red, and having on back a cloth. This has green border, outlined with red and spotted with yellow, and blue centre on which is pink flower and green leaves. Animal standing stiffly; R. fore-leg lost. Silk soft and lustrous. For another fr. perhaps of same material, see Ch. 00362. $4\frac{1}{8}'' \times 3''$. Pl. CXI.

Ch. 00181. Triangular tab of figured silk, evidently from valance of Ch. 00278 type; lined with plain peach-coloured silk. Part exposed much dirtied and faded. Weave, satin twill, fine and very supple; warp, fine silk yarn, unsized; weft, broader untwisted yarn. Pattern a variety of Ch. 00171; pairs of spreading leaves alternating with trilobate flowers on outer edge of circular spot. Ground cream; pattern in deep royal blue, dark olive, dull brown, (faded) peach-colour, and touches of tomato-red, with outlines in peach. Other pieces of same silk found in valances Ch. 00278, 00279, from one of which this evidently came. For fuller descr. and references, see Ch. 00171; above, p. 906. H. $4''$, base of triangle $8\frac{1}{2}''$. Pl. CXI, (design) CXVI. A.

Ch. 00182. Suspension loop of figured silk; greater part torn to ribbons and remainder much faded and worn. To one end is knotted fr. of fine yellow-green damask, woven in small lozenge diaper. The figured silk is a satin twill, very closely woven; warp, a fine yarn, apparently sized; weft, a thicker untwisted yarn. Pattern of 'Sassanian' type, consisting of small circular medallions, $\frac{7}{8}''$ in diam., enclosing pairs of confronting ducks. These are green with deep yellow wings and bills, on pale yellow field; border of medallion dark brown studded with white spots. Outlines not stepped, perhaps owing to smallness of scale, but figs. of birds are stiff. Medallions set out in rows, touching each other at four cardinal points; junction in each case covered by six-petalled rosette. Smaller six-petalled rosettes also placed in spandrels between circles. All are worked out in various combinations of colours mentioned above, while general ground is a dull yellowish grey. For other examples of adaptation of Sassanian designs, see above, p. 911.

This fr. is of special interest as having certainly been woven in China. In extreme smallness of scale on which the pattern is worked, as well as in closeness of texture and fineness of weft, it stands apart from other pieces of formal Sassanian style, which all show the same, rather broad, effective style of weaving of Ch. 009. But in all these points, and no less in colouring (except for absence of blue), it corresponds closely to Ch. 00171, in which Chinese manufacture cannot be doubted. $10\frac{1}{2}'' \times 1\frac{1}{8}''$. Pl. CXI, (reconstruction of design) Pl. CXVIII.

Ch. 00184. Dated paper painting, with Chin. inscr., showing the *Six-armed and Eleven-headed Avalokiteśvara* (Kuan-yin), seated, with the Good and the Evil Genius (?) below. Date given by inscr. A.D. 955.

Avalok.'s upper hands hold up discs of Sun and Moon: Sun in L. containing the bird (here two-legged); Moon in R. containing frog and tree, and Wu Kang attempting to hew down tree (see W. F. Mayer, *Chinese Reader's Manual*, § 864). Second R. hand in *vitarka-mudrā*, second L. hand holds stemless lotus bud at breast; lower hands are stretched out above knees, R. with thumb and fingers spread, L. holding noose. The legs are interlocked with soles up. Third eye in middle of forehead. All outlines of body and limbs are red; iris of eyes red; two profile heads are painted grey, flesh otherwise in natural buff of the paper shaded with light red. Dress, orns., and accessories generally in style of *Ch. 00102, etc.

The Good and the Evil Genius (?) are represented by two children placed on either side of sq. panel with dedicatory inscr. at bottom. Good Genius kneels on R. with hands in

adoration, dressed in long red-striped coat which covers him from wrists to feet. Behind stands fledgeling bird beneath which wavy line is drawn to bottom of picture. Evil Genius dances naked on other side of inscr., flourishing castanets or bones in his hands. Both have short-long black hair tied with red bow on top like children's in Ch. lvii. 004.

Colouring throughout, orange-red, pink, grey, olive-green, and pale yellow; drawing moderately careful; condition fair.

Dedicatory inscr. consists of 7 ll. fairly legible chars. On either side of it narrow cartouche with inscr. referring to child on that side, but that of dancing child is practically effaced. For contents of inscr., see Petrucci, Appendix *E*, II. 1′ 8½″ × 12½″.

Ch. 00185. a–f. Six dated woodcuts on paper, with Chin. text and standing fig. of *Avalokiteśvara* (Kuan-yin) above, printed from separate blocks. Date given in lower block A.D. 947.

Avalok. stands facing spectator, body thrown out to L. hip and R. knee bent; R. hand by side holding flask, L. at breast in *vitarka-mudrā* and with long-stemmed lotus between fingers; Dhyāni-buddha on front of tiara. Dress and orns. of 'Indian' Bodhisattva with short over-skirt as in Ch. 00125, etc. Circular halo, with canopy above. On either side, long narrow cartouche, containing epithets of Avalok. Single-line border round whole. Block 8⅛″ × 5⅜″.

Below, 13 short columns Chin. within single-line border; containing dedication, name of donor and blockmaker, and date as above; cf. Appendix *E*, II. Block *c.* 4½″ × 7⅞″.

For other prints of upper block, see Ch. lvi. 0026. *c* has three paper loops at top for suspension; *b*, *e*, *f*, pin-holes in corners. Fair condition. *a*. Pl. CIII.

Ch. 00186. Drawing on paper with Chin. inscr. showing *Buddhist magic diagram or Maṇḍala.* As in Ch. 00190, etc., centre of diagram an eight-petalled lotus within square; but instead of forming centre of larger enveloping squares, fig. here forms centre of equal-armed cross. External angles made by arms of cross are, however, partly filled in with small squares also containing eight-petalled lotuses, so that outline of diagram as a whole is cross imposed upon somewhat smaller square. It is obvious that by filling in angles of arms completely, a fig. almost identical with those of Ch. 00190, etc., would be obtained. Principle of the two forms evidently same.

Diagram here a charm, perhaps against sickness. In heart of central lotus, single Chin. char. 'Buddha'. Over arm of cross are drawn small dishes, lamps, and vases, with word beside each denoting character of offering symbolized—'water, incense, lamp'. Beside small squares filling in angles of arms are: above, on either side, words 'Medicine King'; below, on either side, an epithet prob. referring to same deity. Along end of each arm, again, are written titles of Four Lokapālas, in words 'Heavenly King, Northern Gate', 'Heavenly King, Western Gate', etc. Finally, outside diagram above, one column of 4 Chin. chars. containing prayer; and below, two groups of three and two chars. respectively, enclosed within rectangular lines and containing on rev., in corner, 2 ll. Chin. Good condition. 1′ 5″ × 1′. Pl. CIII.

Ch. 00187. Drawing on paper, with Chin. inscr., representing *Buddhist magic diagram or Maṇḍala.* Same as *Ch. 00190 but unfinished, central inscr. only being filled in. Cf. also other examples enumerated under above. On rev. 15 ll. Chin. and almost obliterated impress of four sq. seals in red. Fair condition. 1′ 2⅝″ × 1′ 0½″. Pl. CIII.

Ch. 00188. a, b. Two portions of illuminated Chin. MS. roll, containing treatise on names of the Thousand Buddhas. At head of each name is miniature of small seated Buddha. Good condition. See also Ch. 00210, xi. 003. 9′ × 11″ and 1′ 6″ × 11″.

Ch. 00189. Drawing on paper with Chin. inscr., showing *Buddhist magic diagram or Maṇḍala.* General plan as in *Ch. 00190, etc., but on larger scale and more elaborate in detail.

In middle a sixteen-pointed wheel, with many-petalled lotus at centre; wheel much conventionalized and its points orn. with jewels.

First surrounding square filled with series alternately of small lotuses within wreaths, and large lotuses supporting flaming jewels; in corners four small seated divinities placed diagonally; in L. top corner, Bodhisattva or Celestial Buddha with six-leaved crown, and R. hand in *abhaya-mudrā*; in R. top corner, Buddha with *uṣṇīṣa*, R. hand in attitude of blessing; in R. bottom corner, Bodhisattva or Celestial Buddha, L. hand raised with forefinger extended; in L. bottom corner, three-headed and six-armed divinity with elephant hanging behind shoulders, and long bar with ball-head at either end across knees. Four sides of square marked with four signs of compass, S. placed at top.

Next square contains no figs., but is itself subdivided into five concentric squares and dividing lines cut diagonally by short cross-lines.

Next surrounding square divided into panels, six a side, containing sacred emblems or divinities placed on lotuses and orn. with streamers. Among these are: above, crossed Vajra, boar-headed divinity, flaming jewel, conch-shell, trident-headed club (?), and sword; on R., wheel, halberd, buckler, coiled noose (?) with trident on top, club, and Vajra; below, skull-headed mace, elephant-headed divinity, flaming jewel, club with jewel top, conch, and sword; on L., axe, arrow, trident-headed club (?), Vajra, bow, and sword.

Outermost square partially filled with alternate branch of Nāga-tree or coral, and flowering shrubs, complete only on N. side; in four corners appear Mount Meru, rising above lower mountains of world, with its flat top turned towards centre of diagram. T-shaped spaces in middle of each side (see *Ch. 00190) show sea with deity seated on it, and Buddhist emblem on larger scale floating on water. On four sides these are: above, armour-clad deity with trident or halberd, seated on mat, and overhead pair of hands placed together upright with tips of fingers interlocked and turned inwards; on R., a half-naked deity with trident, seated on

monster with double fish-tail, and overhead pair of feet (soles) placed upright; below, armour-clad deity with halberd, seated on rock at edge of water, and beside him hand, upright, with little finger extended, other fingers and thumb bent into palm; on L., fig. in priest's or civilian's robe, with hair in two bunches at side of head, seated on mat with hands in adoration, and overhead pair of Buddha's feet as on R. Narrow end of these T-shaped spaces surmounted by flat arch formed by upper half of two dragons, which issue, jewel in mouth, from mouth of tortoise.

Explanatory Chin. inscrs., in many cases half-effaced, are written in by figs. in each of T-spaces and beside many of other emblems and divinities.

Good condition. 1′ 11″ × 1′ 10¾″.

Ch. 00190. Drawing on paper,** with Chin. inscr., forming ***Buddhist magic diagram or Maṇḍala. In plan, a good example of type followed more or less closely by all other Buddhist diagrams in Collection; but divinities and emblems are here represented solely by written names, not by figs. For others, drawn or written, see Ch. 00186, 00187, 00189, 00379, 00398, 00420, 00428; xxii. 0015, and xliii. 004.

At centre an eight-petalled lotus contained within square; this again surrounded by three outer squares, the greater enveloping the less. In middle of each side of outermost squares or border, section marked off by cross-lines; smaller section (opposite middle of this) is the inner border adjoining. A fig. is thus formed resembling a T with wide head and short thick leg, the head lying along outermost border and leg pointing in towards centre of diagram. In the painted diagrams these figs. are always distinctively coloured; and from inscr. on present example, they seem to be associated with four points of compass. The whole diagram may perhaps represent the universe on plan of formal sq. garden on which Indian plans of Mount Meru are often based. The crossed Vajras on which some of the diagrams (i.e. Ch. 00398 and 00428) are based, and which were supposed to support Universe, make this the more likely.

Whole covered with Chin. inscr. In heart of central lotus, prayer to Buddha; spandrels formed by its circumference and corners of innermost square bear respective names of offerings, 'flower', 'incense', flame', and 'scent'. First outer square is written round with Skr. Dhāraṇī (?), transliterated into 2 ll. Chin.; round its corners written in turn names of Four Lokapālas. Outermost border, and T-shaped spaces, also fully inscr. with names of divinities, all assigned specifically to one or other of four quarters of globe.

On rev. 17 ll. Chin. Good condition. 1′ 4½″ × 11¾″.

Ch. 00191–00202. Series of paper paintings with Chin. inscr., each representing a ***Buddha*** seated on Padmāsana and perhaps including the nine types of Amitābha. Work of the roughest description; drawing poor, colouring coarse and limited to dark chocolate, red, and greenish turquoise, besides pinkish buff for flesh and background. In 00198 and later nos. which prob. formed another set, there is also orange-red and sepia, but no chocolate. The lotus has a turquoise centre, and a single row of down-turned petals, red-tipped or buff; the haloes and vesicas are circular, the former red with buff border, the latter painted in concentric rings of buff turquoise and red. The Buddhas have red lips, but otherwise are painted entirely in buff with black eyes and outlines. At side of each picture is a cartouche containing a hastily scrawled Chin. inscr. giving an epithet descriptive of the deity, but many are illegible, at least in part. The paintings were made in a series on pieces of paper pasted together in strips, and were afterwards cut up into separate pictures; but the tracing has been badly adjusted, as the join almost always comes in the middle of a fig., see 00191–2, 00194, 00197. All have been pasted flat on a stucco surface and are stiff with remains of clay. The poses are various, as follows:

00191. Legs in adamantine pose; R. hand in *vitarka-mudrā*, L. horizontal below it with second and third fingers bent up. Robe chocolate lined with white, under-robe red; R. arm and shoulder bare. Inscr. on R. torn but complete. 10⅝″ × 8⅜″.

00192. Legs in adamantine pose; R. hand before breast, back uppermost but drooping from wrist, thumb, second and third fingers curled up; L. hand hanging over knee. Robe chocolate with turquoise lining, under-robe light red; R. shoulder partially covered. Inscr. on R. 9½″ × 8⅛″.

00193. Upper half of Buddha only, with Padmāsana and L. knee of another above. Robe chocolate with turquoise lining, covering both shoulders and arms; hands not visible. Inscr. on R. 10½″ × 8¼″.

00194. Legs in adamantine pose; R. hand raised but held away from body, open, slightly reversed with palm up and thumb and forefinger joined as in *vitarka-mudrā*; L. hand on knee as in 00192. Robe chocolate lined with turquoise, partially drawn over R. shoulder. Inscr. on L. 9½″ × 8⅜″.

00195. Legs half unlocked with feet resting on Padmāsana; R. hand as in 00194, but slightly curved forward instead of reversed; L. lies open on its back on knee, thumb and forefinger joined. Robe chocolate lined with turquoise, partially covering R. shoulder; under-robe red. Inscr. on R. 10¾″ × 6¾″ to 7½″.

00196. Legs in adamantine pose; R. hand as in 00194, L. raised and held horizontally out at side back uppermost, thumb and forefinger extended, other fingers bent. Robe chocolate lined with turquoise, drawn partly over R. shoulder; under-robe red. One char. of inscr. remains in R. top corner. 10⅜″ × 7⅛″.

00197. Legs in adamantine pose; both hands raised and held as in 00194. Robe chocolate with turquoise lining, partly covering R. shoulder, and held by cord over L.; under-robe red. Cartouche on R. blank, but inscr. on background L. 10¼″ × 8⅞″.

00198. Legs in adamantine pose; hands as in 00191. Red robe lined with white partly covers R shoulder, under-robe turquoise. Two bottom chars. only remain of inscr. on L. R. lower corner also lost. 10¼″ × 8⅜″.

00199. Same as 00198. Paint considerably flaked off. Inscr. on L. Bottom torn off, but long projecting corner on L. shows part of halo of fig. below. 13" × 8¼".

00200. Legs in adamantine pose; R. arm bent up at elbow and hand held towards spectator, palm up, with first–third fingers bent; L. hand open in lap. Robe red with lining and under-robe of turquoise; R. shoulder bare. Inscr. on L. Dark stain in R. lower corner. 9½" × 8½".

00201. R. upper half lost, and with it Buddha's R. hand; L. hand hangs over knee; legs in adamantine pose. Robe red lined with buff, leaving R. shoulder bare, and caught up by cord on L.; under-robe turquoise. Inscr. on R. 10½" × 8½".

00202. Upper part only, showing halo and head to level of eyes. Inscr. on R. (illegible). 4" (incomplete) × 8¼".

For other paintings of same or like series, see Ch. 00392, 00402, and 00413.

Ch. 00203. a–e. Woodcut on paper, with Chin. text and fig. of *Amitābha Buddha*. Arranged exactly as in Ch. 00150. a–d. Buddha seated in meditation on lotus, R. shoulder partially covered by robe. Salutation on R., dedication on L.; 13 ll. Chin. below, mostly transliterated Skr., containing prayer. L. side of (*c*) lost. For another print of same, see Ch. xliii. 003. 10⅜" × 6⅝".

Ch. 00204. Four woodcuts on paper, from same design as Ch. 00151, showing Chin. text and *Mañjuśrī* on lion. Poor impressions printed together on number of small squares of thin paper, pasted together to form one sheet and bordered with stiffer paper. Down middle between impressions pasted another strip of paper, with small Buddha badly drawn and painted at top, and salutation to Amitābha (?) below. Lower part of inscr. obscured by dirt; sheet generally in bad condition. 2′ 4" × 1′ 5¾".

Ch. 00205. Woodcut on paper, showing Chin. text and fig. of *Samantabhadra* on elephant with two attendants. Bad impression from rudely cut block. Design arranged as in Ch. 00150. a, upper half showing S. on the elephant, upon curling clouds, both facing spectator. S. holds sword (?) in R. hand, Vajra upright on L. Oval halo and vesica, flame-edged, from which rays stream outwards. Half-clad Indian (?) groom with goad on R.; Bodhisattva (?) with hands in adoration on L. Central figs. smudged with red paint, obscuring detail. Cartouches on R. and L. with salutation and epithets of S.; 11 columns Chin. below, containing name of donor, etc.; cf. Petrucci, Appendix *E*, II.

Impression on yellow paper, mounted Kakemono fashion on buff paper, but upper end of mount lost. Block 8" × 5".

Ch. 00206. Fr. of paper astrological chart (?), covered with Chin. writing and rectangular diagrams painted in red, grey, brown, yellow, and green. Incomplete at one end. On rev. 4 ll. Chin. in different hand, and paper tag with one l. Chin. on obv., pasted on to edge above. 11" × 1′ 9".

Ch. 00207. Paper sketch showing a *horse and two-humped camel*, with empty saddles, led L. by attendants. For the historical information and date (A. D. 966) furnished by Chinese inscriptions on this sketch, see M. Chavannes' explanations, Appendix *A*, V. c. Drawing of rudest description done with heavy brush; colouring only dark red, grey, and olive-green on trappings of beasts. These trappings consist: for horse, of plain head-stall, leading rein, crupper, and saddle with high pommel back and front covered with long fringed saddle-cloth; for camel, of chequered saddle or saddle-cloth through which his humps pass, and striped cloth hanging across it. First attendant carries whip; second stick or goad; both wear long belted coats and small round black caps.

Whole is drawn over Chin. MS., columns running (except for 2 ll. in larger hand) upside down in relation to drawing. Two-thirds of back also covered with Chin. writing. On R. is torn edge of a third sheet pasted alongside and continuing subject; a further continuation but on different paper is prob. seen in Ch. 00388. Broken in places. 2′ 9¼" × 1′. Pl. XCVI.

Ch. 00208. a–b. Two frs. of paper roll covered with rough sketches; prob. design for larger composition as Ch. 00144. (*a*) shows on obv.: to R. group of women kneeling in tiers with hands in adoration, to L. group of men in same position. Narrow cartouche with Chin. inscr. between. Women's hair elaborately orn. with flower buds and large pins; men wear official head-dress like the Judges in *Ch. 0021, etc. On rev. 16 ll. Chin., badly written. (*b*) shows on obv. same scenes as on (*a*), with inscr. again between men's and women's groups; but shows also continuation at L. end, six-armed seated Bodhisattva holding sword, axe, trident, etc., with one l. Chin. inscr. on either side. On rev. 4 ll. Chin.

Drawing of rudest; features of faces, etc., not filled in. Each, 11½" × 1′ 4½".

Ch. 00209. Paper roll with drawings of human face and fig.; drawings covered with Chin. inscr. explaining distribution of points of beauty and their significance in Buddhist symbolism. From L. to R.: three standing figs. (two back view and one front), incomplete; human face, front view; fig., front view; face, front view (incomplete). Remains of one l. Tib. chars. on back. Fair condition, but torn each end. 10¾" × 2′ 8½". Pl. XCVI.

Ch. 00210. Illuminated Chin. MS. roll, containing treatise on names of the Thousand Buddhas. Date given in colophon A.D. 920. Text interspersed at intervals with miniatures of small seated Buddhas. A sheet of yellower paper, containing large fig. of seated Buddha like Ch. 00396, is pasted at beginning, but most of fig. has been torn off. For others, see Ch. 00188; xi. 003. 51′ 3" × 1′.

Ch. 00211. Paper painting, accompanying cover of Chin. MS. book (?). Cover consists of strip of dark purple cotton (?) fabric, closely woven in small lozenge diaper, neatly turned in round edges and measuring so 5³" × 10".

Over inner side was pasted sheet of paper, the L. half of which has been torn off. It evidently however contained a painting, as remains of streamers and scarves of fig. remain on edge of part preserved. This R.-hand half otherwise is blank except for four Chin. chars. signifying the 'Eight Vajrapāṇis'.

On loose leaf found inside cover, but detached, and measuring $5\frac{3}{4}'' \times 4''$, is painting above referred to. It shows *Bodhisattva of the Sun* standing $\frac{3}{4}$ to R. on a pink cloud and attended by two unhaloed women divinities carrying flowers. Bva. has R. hand in *vitarka-mudrā* and carries long-handled fan in L. On his head Sun-bird with outspread wings; his black hair done in top-knot behind it; flaming halo surrounds head. From his delicate features, rosy cheeks, and patches on forehead he seems to be represented here as a woman.

The two attendants, with same complexion and type of features, are certainly women from their distinctively feminine coiffure, hair being dressed in two high loops like Queen Vaidehī's in *Ch. 0051, etc. All three wear trailing white under-robes, and $\frac{3}{4}$ length blue-bordered pink jackets with wide sleeves, a costume worn both by women and by male officials.

Background green, with line of steep pine-crowned mountains at horizon. In L. top corner red disc of Sun containing (two-legged) Sun-bird and showering red rays upon group below. In R. bottom corner kneel man and woman holding censer and flowers; dress, etc., like that of donors in *Ch. 00102, etc.; but man's coat purple, woman's pink.

Gay colouring of green, pink, blue, and crimson; clever rapid drawing; dainty execution; fair condition.

Ch. 00212. Fr. of illustrated Chin. MS.; upper edge only of roll with upper end of painting at R. end. This shows man in long-sleeved coat and black hat, $\frac{3}{4}$ R., holding roll of paper in arms. Roughly drawn. To R. of fig. two short cartouches for inscr., blank; to L. one cartouche inscr. with 7 Chin. chars. Rev. blank. $4\frac{1}{2}'' \times 1' 2''$.

Ch. 00213. Miniature Chin. MS. book with sketch of demons or monsters inside cover. Drawing a mere scribble. Book made of paper ruled for full-size manuscript roll, cut up and sewn together. Sixteen foll.; three first covered with writing, remainder blank. Size of fol. $2\frac{1}{2}''$ sq.

Ch. 00214. Fr. of Chin. MS. roll, interspersed with rough sketches of human and griffin-headed monsters; palm-tree with monster resembling horse or unicorn; human heads forming centre or apex of diagrams based on trigrams, and other diagrams built up of small squares, arranged upon straight lines, etc. Text prob. magical, covering (with drawings) both sides of paper. Only upper half of roll preserved. $6'' \times 1' 7''$. Pl. XCVIII.

Ch. 00215. Lower end of silk painting mounted on paper in the fashion of a Kakemono, with wooden roller at bottom. Shows only two lotuses, blue and carmine, foot of Bodhisattva on the latter, and hanging end of stole. Chin. char. on back. $10''$ (incomplete) $\times 10\frac{1}{4}''$.

Ch. 00216. Large silk painting with Chin. inscr., fragmentary but, so far as preserved, in exceptionally fresh condition, representing *Paradise of Amitābha or Śākyamuni*, and with side-scenes showing the legend of Ajātaśatru and Meditations of Queen Vaidehī as in *Ch. 0051, etc. Inscriptions refer to side-scenes only, giving no date. Side-scenes divided from main picture by broad band of vermilion, covered with trailing bunches of leaves and flowers in vivid blue, orange-red, copper-green, and pink or grey stems. Row of scenes also along bottom, separated from upper part by band of hexagonal diaper in blue and green, hexagons containing rosettes in red and pink. Painted border round whole, of dark brown orn. with bold groups of entwined tendrils in orange-red. L. upper corner, L. lower corner, L. centre, and most of R. half preserved.

Of Buddha only R. elbow, side, and knee remain. He sat cross-legged, with R. arm stretched out from shoulder and bent up at elbow. Only its under-side as far as elbow, wrapped in mantle, is preserved. This pose nowhere else found amongst paintings of Collection. On L. remains of Bodhisattva offering flowers, adoring Garuḍa with blue ruffled wings, red-feathered legs, and Bodhisattva-like bust and arms, and standing monk; above, traces of another standing monk and Bodhisattva. In front remains of altar, of large vase filled with flowers standing on tiled floor, of edge of lake with infant soul rising from it, and of fragmentary inscr. defining his rank in new life as in Ch. xlvii. 001.

At top remain steeply curved indigo roofs of celestial mansions and galleries, and sky. Latter deep blue, sprinkled with gilded stars, and filled with small seated Buddhas; umbrella-canopies; flying white streamers from central pavilion; flaming jewels on lotus pedestals; and drums painted dark brown and tied with red ribbons. Drums are cylindrical, or of narrow-waisted shape, and have strings stretched outside for production of different note by pressure under arm; while one has also projecting staff with cross-hammer which fell and hit strings, seen in modern (Indian?) examples. In upper L. corner is also small seated fig. of Samantabhadra on elephant, doubtless one balanced by Mañjuśrī on opposite side when painting was complete.

Sides of picture occupied by three groups of divinities with attendant Bodhisattvas: above, pair of seated Bodhisattvas (Mahāsthāma and Avalokiteśvara); beneath them pair of Buddhas seated behind altars; and in bottom corners pair of standing Buddhas. Behind each group cluster of red-flowering trees as descr. in *Ch. lii. 003. The Buddhas, where their hands preserved, have them usually raised with thumb and third finger joined. Bodhisattvas attendant on seated Buddhas have their hands in pose of adoration; those attendant on standing Buddha in L. corner clasp finger of R. hand within those of L. The only one whose hands are preserved, in R. corner, carries dish of flowers.

Between standing groups at bottom came musicians and dancer on small front terrace; but dancer lost, and part only of six musicians on one side, and three on other, remain. Instruments visible are flute, pipe, lute, psaltery, and drum, all of same type as in *Ch. lii. 003.

The picture as a whole presents medley of brilliant colours and gilding, which has an exceedingly decorative effect. Painting done in style of illumination, delicate, clear, and highly finished even in smallest details, and with no light or shade. Amitābha's flesh was gilded (as seen from the elbow); that of minor Buddhas is dark flesh-pink shaded with red; that of Mahāsthāma and Avalokiteśvara a lighter flesh pink; and of great majority of attendant Bodhisattvas and musicians white, only faintly tinged with palest pink. Flesh outlines all pink or red; only hair, arched eyebrows, and irises of eyes of Bodhisattvas black; their small mouths bright red.

Their faces and forms are of feminine type; their hair done in sweeping line above forehead, a long lock before ear, and large drooping bunch at back of head. Tiaras are narrow fillets only, of white or gold, with floating streamers at ears and small jewel in front, so that stiffness of orig. Indian high top-knot and metal diadem is entirely done away with. Their robes and scarves are of soft pink, green, blue, chocolate, or red, sprinkled with varied flower patterns in contrasting colours, and leaving arms and upper part of body mostly bare. Profusion of ornament covers tiles of terrace floors; piles rising from water; canopies, altar-cloths, and haloes.

Side-scenes much simpler in style and less delicately drawn, but equally gay in colour. They are in secular Chinese style throughout. Most of those preserved have inscriptions which fix interpretation of scene for this and others of Paradise pictures; see *Ch. 0051, etc. They represent on R. the Meditation of Queen Vaidehī, on L. the Legend of Ajātaśatru, and run as follows: On R., Vaidehī meditating (i) on Sun, a red disc upon clouds containing the three-legged bird;

(ii) on Water, a running stream;

(iii) on ground of *Sukhāvatī*, the 'sacred earth', a square divided into a number of small squares of brilliant blue, copper-green, and orange;

(iv) on sacred tree, or 'grove', the Bodhi-tree; a cluster of star-leaved red-flowering trees of type of *Ch. lii. 003, etc., placed in draped basket on platform;

(v) on lotus tank, descriptive char. lost from inscr.;

(vi) on shrine, representing the Mansions of *Sukhāvatī*;

(vii) on Padmāsana, representing the Flowery Throne;

(viii) on a Buddha in red robe, seated with hands in pose of blessing;

(ix) on a Buddha in chocolate robe, seated in meditation;

(x) on a Bodhisattva (Avalok.) of whom pedestal only remains.

Inscriptions of three last incompletely preserved. Vaidehī kneels on praying-mat with hands in adoration. She wears copper-green skirt, and wide-sleeved vermilion jacket having brown border with green spots. Her face white with red patch on cheeks; her hair black, done in small top-knot with sq. gold clasp or comb in front, and in roll round her neck. Of two following scenes (xi) and (xii) painting entirely lost, and parts only of inscr. remain without distinctive chars.

On L. three scenes only preserved at top, and two at bottom (one uninscr.), with traces of inscr. (illegible) along broken edge between. They are as follows:

(xiii) Ajātaśatru as hermit; standing outside his hut, among pine-trees at top of steep mountains, ragged staff in hand.

(xiv) Jātaka scene, representing Śākyamuni as a white rabbit, in which form he once gave himself to a hunter to save him from starvation. The rabbit only is seen, bounding across the country.

(xv) Unidentified; inscr. incomplete. Bimbisāra (?) and Vaidehī walk with hands in adoration; two shaven monks, haloed, appear to them on cloud. Palace as verandahed pavilion in background.

(xvi–xviii) Scenes lost, and remains of inscr. illegible.

(xix) Unidentified; inscr. lost. Ajātaśatru (?) menaces Bimbisāra (?) with sword; B. attempts to draw his own. Both wear Minister's dress (see Ch. 00114).

(xx) Ajātaśatru enters Buddhist monkhood (?). Inscr. partially illegible. Three men in plain belted coats, the foremost with orange napkin tied over his hair, advance L. from corner of decorated and streamered pavilion.

The buildings in these scenes show especially clearly, on the roof-tree ends, the confronting beast and bird heads characteristic of Chin. architecture.

Of bottom scenes only three remain (one without inscr.). From L. they are as follows:

(xxi) *Death of the Wicked.* He lies on couch on verandah, his wife watching over him, two shock-headed demons strangling him with scarlet ropes. Below his body is seen flung into boiling caldron, over which one of ox-headed gaolers of hell presides with pitchfork.

(xxii) *Sickness of the Wicked.* He (or she?) sits up in bed supported by a woman. In front of pavilion a younger woman with lute and a man are advancing towards sq. object, which seems to represent mat with offerings laid upon the ground. On it are small black dishes with red contents, clouds of white smoke drifting from some. The man stoops holding leaf-shaped red object, perhaps torch with which he has lit the incense.

(xxiii) Unidentified; inscr. lost and scene incomplete. Remainder shows corner of verandahed building, with small shrine outside built of grey tiles. Between them a man runs to back of scene, with hands over head brandishing a stick. He wears white trousers, purple coat, and black tailed cap. In front another man, similarly dressed but with coat trailing from waist and body and arms bare, violently beats person in purple jacket and with blue close-cropped hair of monk, who sits or kneels on ground holding his hand to his head. Half of this fig. lost.

6′ 7″ × 5′ 8″. (Portions) *Thousand Buddhas*, Pl. XXX.

Ch. 00217. a–c. Three Pōthī fols. with paintings of demons, and Chin. and Brāhmī inscriptions referring to same. Demons, six in number, painted on obv. and rev. of each fol. and occupying in each case one half of leaf. Upper half (which shows string hole of Pōthī) bears inscr.

Demons, all standing, have human bodies and limbs, women's breasts, and beast or bird heads. Feet, where preserved, usually in accord with character of head; but,

occurring at end of fol. they are in some instances lost. They wear *dhōtīs* and narrow stoles of dark pink, blue, or green, and are generally accompanied by children. From inscr. the demons appear to have been credited with power of saving children from illnesses, and directions are given for prayers to them with this object. In detail their chief characteristics are as follows:

(a) *Obv.* Cat- or leopard-headed; feet lost; flesh brown; R. hand raised as if beckoning; L. hand holding by stem large pink object like half-open flower, but flower is turned downwards and demon grasps stem like neck of bottle. Cf. same object in L. hand of most of other demons. Between legs appear head and part body of infant, apparently lying on ground. 3 ll. Chin. and Brāhmī inscr.

(a) *Rev.* Hawk-headed, with wings; feet lost; flesh dark grey. L. hand grasps undetermined obj. like demon above, and in same fashion; R. hand by side, perhaps holding hand of standing child, lower half of whom is preserved below standing by demon's R. leg. 3 ll. Chin. and Brāhmī inscr.

(b) *Obv.* Cock-headed, with wings and cock's feet; flesh yellow. R. hand raised with first and second fingers extended, thumb and other fingers joined; L. hand grasping obj. as in two preceding figs. Child in green shirt sits by R. foot, clasping leg. Painting broken. 4 ll. Chin. and Brāhmī inscr.

(b) *Rev.* Dog- or lion-headed, with wings and bird's feet; flesh brown. Stands facing spectator, holding up by wrists and ankles human fig., whose inside he devours. Painting broken. 4 ll. Chin. and Brāhmī inscr.

(c) *Obv.* Stag-headed, with deer's hooves (?) partially preserved; flesh uncoloured. Holds young child in arms. 4 ll. Chin. and Brāhmī inscr.

(c) *Rev.* Ox-headed, with hooves; flesh dark blue; limbs specially long and thin. R. hand holds noose (?), L. undetermined obj. as in case of (a) obv. and rev. and (b) obv. On stand between feet lies infant in swaddling bands. 9 ll. inscr. almost entirely Chin. 12¾" × 3". (a) Pl. XCVI.

Ch. 00218. Fr. of Chin. Sūtra with rough drawing on rev. of series of *seated Buddhas*, running one above the other length of scroll. One complete, and parts of two others visible, with legs interlocked; R. hand (where preserved) in *vitarka-mudrā*, L. in lap. One face painted white. Rough conventional practice work. Stout brownish paper; torn. 2′ 8¼" × 10¾".

Ch. 00219. Remains of drawing on paper, with Chin. inscr., forming *Buddhist magic diagram or Maṇḍala*. About three-quarters preserved; L. lower quarter missing. Drawing in red, writing in black, ink.

General plan same as in *Ch. 00190, etc., with circle at centre containing star formed of four crossed Vajras, and seated Buddha at heart of it. B. seated on lotus on top of lion-supported throne, with lotus carrying jewel (?) growing on either side. Elongated oval halo; arms and breast bare. Each arm of Vajra-star is filled with small seated Bodhisattva; each spandrel of small square containing circle, with two. All these have their names or epithets written over them in tiny Chin. chars., almost illegible.

There are four outer squares instead of three. First containing four small seated Bodhisattvas on each side, and Vajra head in each corner. These Bodhisattvas are uninscr., but carry emblems such as flaming sword, flask on lotus, jewel on lotus, crossed Vajra, etc. Second square contains Buddhist emblems tied with streamers, and demonic many-armed deities seated on rocks or animals, especially on yaks or bullocks. Interspersed with these are some figs. in Chinese dress, unhaloed; one in trailing robes with phoenix on head, and others naked except for loin-cloth, with long rabbit-like ears and bat-like wings, perhaps *pretas*. So far figs. are all turned inwards; in remaining squares they face outwards. Third square contains only Bodhisattvas, placed diagonally at corners, and demonic divinities with lassoes, etc., in part of T-space (see *Ch. 00190) which falls across its sides. Remainder represented as geom. orn. border and draped valance, like Ch. 00278.

Fourth square covered, except at T-spaces and corners, with close lines of small Chin. writing, and continuation of wide band of inscr. which on this side extends to 31 ll. outside limit of fourth square, and on other side to 27. In each corner of fourth square a sword placed diagonally; in T-spaces, in each case, an elephant and lion, with jewel on back, facing animal which stands between them facing spectator. In two cases, this is a phoenix with ruffled wings; on head of one lotus, of other crossed Vajra. In third case, it is a horse, supporting jewel; fourth lost.

Figs. in second, third, and fourth squares all inscr. in small writing as in inner circle. Rev. also inscr., at top and bottom, with 9 and 11 ll. Chin., apparently as there was no margin for them on obv.

H. 1′ 9½", width with external inscr. 2′ 5".

Ch. 00221. Silk painting representing the *Two-armed Avalokiteśvara* (Kuan-yin), seated, without attendants. Painting intact but much faded, and border lost. Picture finished on each side by band of lozenge diaper between lines of Indian red, and similar line of red below, beneath which perhaps were donors.

Avalok. is only fig. of picture proper. He sits on variegated lotus with legs interlocked, R. hand in *vitarka-mudrā* at breast, L. below holding stemless lotus bud. Large fig. of Dhyāni-buddha within trilobate setting forms front of his tiara, which is high and of solid metal painted in brownish-red 'bronze' colours as in *Ch. 0051, etc.

Robes, fig., and orns. treated as in Ch. 00167, colouring of former crimson, slate-blue, and green; hair black, and eyes slightly oblique. Circular halo and vesica were painted with waving rays and vandyke, jewel, and rosette ornamentation as in *Ch. 00102; but only traces of paint on them and the Padmāsana remain. Behind halo, as there was no room for it above, a draped and jewelled canopy; floating blossoms sprinkle background, which was painted slate-blue. Workmanship mediocre. 1′ 7" × 1′ 6½".

Ch. 00222. Fr. of large silk painting representing *Maṇḍala of a Buddha* (undetermined). Complete in width with remains of orig. silk border; top and bottom lost;

colouring almost completely gone. Buddha seated on lotus cross-legged, behind altar, with R. hand in *vitarka-mudrā*; L. was horizontal before waist as in representation where he carries rice-bowl, but is destroyed, so that exact pose uncertain.

The two chief Bodhisattvas have their hair done in double-leaf form of top-knot, and carry flaming jewels in one hand, while the other is in *vitarka-mudrā*. Rest of assembly consists of the Ten Kings, six shaven Arhats, and twelve Bodhisattvas (not individualized), all with hands in adoration. No musicians, dancer, or nymphs, and no lake as in Sukhāvatī paintings; so Buddha prob. not Amitābha. Below altar runs band of rhomboidal orn., below which remain in middle two small seated Buddhas attended by Bodhisattvas (and one of them also by fig. holding begging-staff). Before them are small figs. in Chinese secular dress, incompletely preserved, but suggesting scenes of judgement. Stūpa and monk also traceable by Buddha on R.; grass hut and corner of enclosure on L.; and two ducks (?) in centre. Workmanship indifferent. 2′ 11″ (incomplete) × 4′ 1½″.

***Ch. 00223. Large silk painting,** representing *Thousand-armed Avalokiteśvara* (Kuan-yin), seated, with attendants. Broken and faded; fr. of border of purple silk damask, woven in lozenge lattice-work, preserved round R. upper corner.

General Note. The painting is one of a number representing same subject and all arranged on practically same scheme. These consist of Ch. 0029, 00452, 00458–9; iii. 004; xxi. 006 (linen); xxviii. 006; xxxiii. 002; xxxviii. 001; liv. 001; lvi. 0014, 0019; cf. also Six-armed Avalok. Ch. 00105. In middle is large fig. of Avalok. seated with legs interlocked, on lotus, under draped and tasselled canopy. His inner hands hold multiplicity of sacred emblems; his outer form circular nimbus enclosing whole fig. In two of the more decorative examples (Ch. xxviii. 006; lvi. 0014), fig., with hand-halo and Padmāsana, is further enclosed in circle of white, singling it out from background and surrounding figs. Outer hands empty but open, with open eye in palm of each.

Avalok.'s dress, ornaments, and coiffure are always those of more 'Indian' type; fig. shows either one head or eleven. In latter case these are arranged as in paintings of Eight-armed Avalok.; see *Ch. 00102, etc. Chief head, body, and inner hands and arms are usually painted yellow, shaded with red, while outer rings of hands are red or pink; hair black or bright blue, occasionally brown; eyes usually almost straight, with third eye upright in centre of forehead; small moustache and wisp-like beard, green over black. Dhyāni-buddha appears always on front of tiara where there is one head; and as topmost of small heads where there are eleven, except in Ch. liv. 001 and lvi. 0019, where it still appears as small seated fig. in middle of lowest row of heads.

Chief emblems held are Discs of Sun and Moon (as in *Ch. 00102, etc.); flask of ambrosia (a two-handled or handleless vase with stopper, or a tall long-beaked jug; Ch. xxviii. 006 shows an example of a bird-headed jug); seated Buddha; bowl of rice; begging-staff; trident; Vajra and Vajra-headed bell; flaming jewel; willow branch; Stūpa (in form of Chinese pavilion); looking-glass; Wheel (of the Law); skull-headed mace; bird-headed mace; Vajra-headed mace; sword; pike; bow and arrow; buckler (oblong or round; Ch. xxviii. 006 shows Gorgon-faced shield); sacred book and sacred roll; conch-shell; noose; rosary; coin; set-square; bunch of grapes; red, blue, and white lotuses; and less commonly, quiver (Ch. 00452), cloud, fly-whisk, and Padmāsana.

Whole disc containing Avalok. rises on cloud of vapour from tank, in which stand two *Nāgas*, in armour or modification of Bodhisattva dress, supporting cloud on either side. In front of tank is often draped altar with sacred vessels, as in Paradise pictures (*Ch. lii. 003, etc.). On either side of it usually (but sometimes higher in picture) an emaciated old man in ascetic garb with long beard and uncut hair (usually white) or bald-headed, and red-cheeked Nymph in dress of Chinese woman, or of dancer in Paradise pictures. Old man usually sits or kneels with R. hand at head in gesture of salutation, and is drawn with realism and individuality. Nymph is of conventional type and offers dish of flowers. From inscriptions on Ch. lvi. 0014 they appear to represent the *Sage of the Air* (?) and the *Nymph of Excellent Virtue*.

In bottom corners are demonic many-armed forms of *Vajrapāṇi*, straddling against background of flame, and brandishing Tantric emblems such as skull-headed mace, bell, Vajra, rosary, wheel, trident, and noose. They are painted dark blue, red, or grey, with fiery hair, tusks, and snakes or chains of skulls wreathed about their arms, necks, and legs.

Sides of painting, where not empty, are filled by seated or standing Bodhisattvas and Lokapālas, mostly not individualized; in upper corner are usually *Bodhisattvas of Sun and Moon*. Latter are of small size, seated with hands in adoration—in all cases but Ch. lvi. 0014—on their five white (or red) geese and five white (or red) horses, but the allocation of the 'Vāhanas' is in some cases reversed. Nimbus of Moon bordered with white, that of Sun with red.

Small painting Ch. 0029 contains only figs. of Avalok. and donors; Ch. xxxiii. 002, the same with addition of Bodhisattvas of Sun and Moon; Ch. xxxviii. 001 is too fragmentary and in too bad condition to show identity of figs. composing it; but in all other cases the Nāgas, Vajrapāṇis, Nymph, and Sage are found, and in all but *Ch. 00223 and 00452 Bodhisattvas of Sun and Moon. Attendant impersonal Bodhisattvas and Lokapālas vary in number according to space available and fancy of artist, and in some cases are entirely omitted. In Ch. lvi. 0014, 0019, however, they form an important element in picture, and contain representations of Brahman, Indra, and other Hindu gods.

In types of figs. and treatment of accessories (haloes, canopies, Padmāsanas, etc.), series follows same conventions as series of Paradise pictures and shows same variation of skill in workmanship. Style in majority corresponds to that of paintings descr. under *Ch. 0051; the highly

decorative but somewhat lifeless Ch. xxviii. 006 corresponds to fragmentary Paradise Ch. 00216, both unique amongst other representations of these subjects.

Ch. 00223. For treatment of central fig. see above. Avalok. here single-headed, with slightly oblique eyes and brown hair. Discs of Sun and Moon retain imperfect figs. of phoenix, and of tree, frog, hare, and mortar. Amongst attendants Bodhisattvas of Sun and Moon are missing, but *Nāgas, Vajrapāṇis, Nymph, and Sage,* four armed *Lokapālas,* and six unparticularized *Bodhisattvas* are found, with signs of other Bodhisattvas along broken lower end.

Nāgas wear species of Bodhisattva dress, with rolled-up breeches, and have no sign of serpent origin; Lokapālas are of semi-monstrous type and sit with legs half unlocked holding swords upright; Nymph wears dancer's dress with red coif-like head-dress as in Ch. 00105; impersonal Bodhisattvas wear dress of 'Indian' Bodhisattva type (see *Ch. lv. 0014), or dancer's dress. Colouring orig. chiefly crimson, green, blue, and 'bronze' colour on dull green background, but mostly lost; workmanship mediocre. 5′ 4″ × 3′ 9″ (without border).

Ch. 00224. Dated silk painting with Chin. inscr., representing *Bhaiṣajyaguru* (?) with Bodhisattvas and donors. Date given in inscr. A.D. 939. Made of one breadth of silk (2′ 0¼″); border lost and painting broken, but colours fresh.

Bhaiṣajyaguru (for identification cf. Petrucci, Appendix *E*, III. vi) sits in middle under canopy, behind altar, with Samantabhadra and Mañjuśrī on either side. Treatment of figs. and accessories as in large Paradise pictures (see *Ch. lii. 003); Bodhisattvas of 'Chinese Buddhist', not 'Indian', type. Buddha has R. hand in *vitarka-mudrā*, L. holding alms-bowl; conventional shading of flesh somewhat exaggerated. Bodhisattvas evidently both had hands in adoration, but face and hands of one destroyed. Colouring crimson, orange, slate, and green on light background; with blue, white, etc., on haloes and vesicas; but almost entirely gone from latter. Bodhisattvas' flesh, and details of streamers and jewels, show no sign of colour, and were perhaps never finished. Workmanship comparatively rough, and drawing careless; e.g. altar vessels drawn quite off edge of altar.

Donors man and woman kneeling, resp. on R. and L. of dedicatory inscr. at bottom; man attended by two boys (one evidently intended for small child), woman by girl. Attendants all stand, older boy carrying long-handled fan, younger fly-whisk; girl also clasps in her arms what may be a fan. The dress of two principals same as in *Ch. 00102, etc.; but the woman's sleeves narrower, and her head-dress of moderate size. The attendants' dress is like theirs, but their hair different; that of girl and older boy done flat across top of head, and tied with red ribbon at each side into ball from which short lock escapes outward; that of smaller boy cut short round neck and adorned on top with red bow.

Inscr. consists of dedicatory inscr., 12 ll. fragmentary but clearly legible so far as preserved, and one l. by each of three sacred figs. 2′ 5″ × 2′ 0½″.

Ch. 00225. Remains of silk painting with Chin. inscr., representing *Kṣitigarbha* as Patron of Travellers and Protector of Souls in Hell, with donors; but drawing and colour practically obliterated and inscr. illegible. Figs. still traceable: part of K. seated on rock (?) with beggar's staff and red head-shawl; man and woman donor, four Judges, priest, and white lion, and group of condemned souls and looking-glass; all as in *Ch. 0021. Upper half lost. At bottom, two men and three women donors, standing; dress as in *Ch. 00102; and red silk border. Inscription attached to all figs. in picture. 3′ 6″ (incomplete) × 2′ 1″.

Ch. 00226. Illuminated Pōthī leaf, showing *Buddha* in centre seated on lotus under flowering trees; both hands held up at breast, palms out. On his L., under another tree, stands Bodhisattva with hands in adoration, with monk again behind him; at end three-legged stand carrying seven flaming jewels (?). These are small circular objects, surrounded by oval flames, blue, red, or green, and piled one upon another. On Buddha's R. stands another monk under a tree, and behind him a third kneeling on mat. B.'s flesh gilded; his red under-robe covered with gilt spots; hair black. Priests wear yellow robes barred with red; their hair black and short. Good condition. 1′ 2″ × 3⅛″. Pl. XCIV.

Ch. 00227. Triangular tab of figured silk, prob. from valance Ch. 00278, where others of the same are found. Woven in satin twill, thick but supple. Pattern: six-petalled rosettes 2¾″ in diam. set out in rows; the spacing in each row alternating with the spacing in the rows above and below, and the rosettes in each joined by six-leaved stems set diagonally and thus forming a lattice-work. Lozenges thus produced are filled by pair of small trefoils springing from the rosettes on either side, and small lozenge-shaped rosettes above and below. Ground dark blue; rosettes shaded pink with white outlines, the large having also dark blue centres containing an inner whorl of small petals in blue and white, and dark blue heart-shapes at the base of the outer petals; leaves and trefoils pale green; all somewhat faded. H. 4½″, base of triangle 11″. Pl. CVI.

Ch. 00228. Misc. cuttings of silk brocade, woven with ground of well-marked twill with bright red warp and weft. Face of material formed chiefly by warp, which is of fine stiffened yarn; back by soft weft, which is broader and untwisted. Frs. preserved show two varieties of inwoven circular 'spot', one made of three phoenixes of the cock-pheasant type whirling in a circle with heads to centre; the other of three pointed leaves arranged in the same way.

Spots woven in twill with bright yellow silk, introduced only to form spot and cut short behind as in Ch. 0065. Twill of spot runs at right angles to that of fabric; arrangement of spots not recoverable. For other examples of this purely Chinese type of pattern, see the list under Ch. 00179, and for other true brocades under Ch. 0065; also above, pp. 905 sq. Gr. length 9″. Pl. CVI.

Ch. 00229. Fr. of silk brocade, thick and soft; woven in twill with bright red warp and weft like the preceding, and

orn. with circular 'spot' of richer design. Part preserved shows outer edge of dark purple and pale pink widespread flowers, with yellow and green centres, alternating between dark green leaves, and growing on yellow tendril-like stems from centre of white and pink blossoms. As in Ch. 00228, variegated yarns, introduced only to form spot, run with warp of the fabric, and are cut off behind. Here, however, they are not inwoven with warp, but pass over the twill ground in loose threads, long or short as required to block out forms of leaves and flowers, and giving effect of satin-stitch embroidery. For other true brocades, cf. Ch. 0065. Colours very fresh. $3'' \times 1\frac{1}{8}''$ to $\frac{1}{2}''$. Pl. CVI.

Ch. 00230. Misc. cuttings of figured silk; woven in thick firm satin twill as Ch. 009. Ground bright red. Pattern: a repeating octagonal spot, $8\frac{1}{2}'' \times 9''$ in diam., set out in rows horizontally apart *c.* 1", vertically *c.* 2". In spandrels between each group of four octagons are smaller rosettes of similar character. The large 'spots' composed of intricate bird and flower pattern, conventionalized almost beyond recognition and worked out in dark blue and white, relieved with light blue, bright yellow, pink, and green; last appearing at outer edges of design.

The design, akin to that of Ch. 00369, is of a type not otherwise represented in the Collection; for an explanation see above, p. 910, where transformation, perhaps at the hands of Central-Asian weavers, of an originally Chinese design is suggested. But all details have hardened almost into geometric design.

Texture and method of weaving correspond nearly to those of Ch. 009 group, and all forms are carried out with the rigid 'stepped' outlines characteristic of it; but these give the effect, with the now intricate pattern, of a carpet design much more than a textile.

Good condition. Longest fr. 12". Pls. CVI, CXII, and (reconstruction of design) Pl. CXVIII.

Ch. 00231 a–b. Two frs. of silk, lemon yellow and pale buff. Woven in twill, running in opposite directions on ground and pattern. Warp (buff), a medium-fine slightly twisted yarn. Weft (yellow), an untwisted broad yarn. Pattern: conventional scroll bearing bracts, buds, and leaves. Condition perfect. Each fr. $2\frac{3}{8}'' \times 2\frac{1}{4}''$. Pl. CXII.

Ch. 00232. Twenty-two frs. of silk damask, lemon-yellow and apricot. Woven in twill, running in same direction across ground and pattern. Warp (lemon-yellow), a medium-fine twisted yarn, prob. sized. Weft (apricot), a broad yarn without twist. Pattern: a conventional floral scroll with long narrow leaves. Condition perfect. Gr. M. $18\frac{3}{4}'' \times \frac{7}{10}''$. Pl. CXII.

Ch. 00233. Eight frs. of silk damask, lemon yellow and cream. Pattern woven in large twill, and ground in fine twill running in same direction. Warp, a fine cream twisted yarn, prob. sized in all but one fr. which seems unsized. Weft (lemon yellow), rather fine untwisted yarn. Pattern large and massive, too fragmentary to reconstruct, but containing leaves of decided 'Persian' type, round at base, tapering, and sharply serrated. Condition perfect. Gr. M. $7\frac{1}{2}'' \times 1\frac{3}{4}''$.

Ch. 00234 a–d. Five frs. of silk damask, lemon yellow, points from valance streamer. Pattern woven in large satin twill; ground in fine twill running in reverse direction. Warp (pale buff), fine untwisted yarn, prob. sized. Weft (lemon yellow), broad untwisted yarn. Pattern: highly conventionalized lotus and leaves, arranged as a large 'spot' pattern alternately elliptical and lozenge, set out diagonally. Condition good; slightly faded and soiled. Each fr. $4\frac{5}{8}'' \times 4\frac{3}{8}''$.

Ch. 00235. Eighteen frs. of silk damask, yellow-ochre. Ground fine plain weave, pattern large twill. Warp and weft the same colour, and of untwisted yarn; warp sized. Surface polished owing to heavy calendering. Pattern composed of bold leaves and flowers, but too fragmentary to reconstruct. A large sheath occurs with recurved lips, common in Turkish tile work. Condition perfect. Gr. length 19".

Ch. 00236. Ten frs. of silk damask, dark yellow-ochre. Pattern woven in twill, with ground of much finer twill running in same direction. Weft predominates in pattern and warp in ground. Pattern seems to be a large floral one, but is too fragmentary to reconstruct. Some pieces show calendering. Condition perfect. Gr. M. $4'' \times 2\frac{7}{8}''$.

Ch. 00237. Five frs. of silk satin, dark yellow-ochre. Woven as a double cloth of which the face is satin twill and the back plain; the yarn of the back being coarser than that of the face, and the two skilfully interwoven making a strong and substantial fabric. Condition good, but surface rather worn. Gr. M. $4'' \times 3''$.

Ch. 00238. Five frs. of silk damask, dull purple. Woven with ground in small twill, and pattern coarser. Design: a spot, well separated, prob. an open double lozenge device with solid pear-shaped spots within lozenges and in external angles. Very fragmentary. Warp and weft of equal thickness and of untwisted yarn. Condition good. Gr. M. $6'' \times \frac{3}{4}''$.

Ch. 00239. Fr. of cream-coloured silk damask, poor quality. Ground large, pattern fine twill. Design: a well-covered floral scroll. Warp and weft yarns equally fine and untwisted. Condition good. $3'' \times 2\frac{3}{4}''$. Pl. CXXI.

Ch. 00240. Two pieces of silk damask, dark dull purple. Ground plain, pattern twill, close and well-woven. Design: bands of chevron (three lines in each) touching at points. Lozenges thus formed occupied, in alternate rows, by elliptical quatrefoil rosettes placed vertically and elliptical (hexagonal) rings placed horizontally. Cf. Ch. 00342. b. Faded one side but otherwise well preserved. $1'\,11\frac{1}{4}''$ (selvedge to selvedge) × *c.* 4" and $6'' \times 3\frac{1}{2}''$.

Ch. 00241. Three frs. of silk damask, yellow. Weaving similar to Ch. 00233; pattern floral, fragmentary. Condition perfect. Gr. length $5\frac{3}{4}''$. Pl. CXXI.

Ch. 00242. Fr. of dull purple silk damask. Similar in texture to Ch. 00238. Pattern so far as preserved shows a line of chevrons (?) with volutes at angles above. Condition good. $3\frac{3}{4}'' \times 1\frac{1}{2}''$. Pl. CXXI.

Ch. 00243. Fr. of silk damask, pale blue. Ground and pattern in reverse twills; ground weft, pattern warp. Design: elliptical spots about $\frac{1}{4}''$ in diam., placed in diagonal rows $\frac{1}{10}''$ apart. Condition good. $4\frac{1}{5}'' \times 1\frac{1}{10}''$. Pl. CXXI.

Ch. 00244. Fr. of silk damask, orange-red. Ground plain; pattern loose twill. Design: a circular spot, *c.* $2\frac{1}{2}''$ in diam., formed of four highly conventionalized flowers radiating from a common centre, and repeating at intervals of *c.* $\frac{1}{4}''$. Texture thin and soft. Much perished and faded. $6'' \times 1\frac{1}{8}''$.

Ch. 00245. Fr. of silk damask, orange-red; two pieces joined. Closely resembles Ch. 00244, but pattern prob. slightly different and more widely spaced. Much perished and faded in parts. $10'' \times 1\frac{1}{4}''$.

Ch. 00246. Two frs. of silk damask (suspension loops of banners); thin, dull blue. Ground plain, pattern broken twill. Design: a circular floral spot, formed of four conventionalized flowers radiating from a common centre. Repeats in rows set out diagonally, and apart from each other (vertically) *c.* $\frac{1}{4}''$. Cord of dull yellow silk sewn to one. Fair condition. Gr. fr. $8'' \times 2\frac{1}{2}''$.

Ch. 00247. Fr. of silk damask, thin, crimson. Ground fine twill, pattern more open twill. One edge shows selvedge. Pattern too fragmentary to reconstruct. Condition good. $3'' \times 1\frac{3}{5}''$.

Ch. 00248. Two frs. of silk damask, bright pink, thin. Ground plain, pattern broken twill. Design: an elliptical four-petalled rosette and a four-armed floral spot, repeating in alternate rows set out diagonally. Good condition. Gr. M. $3\frac{1}{4}'' \times \frac{4}{5}''$.

Ch. 00249. Two frs. of silk damask, thin, soft pink, faded; one forming centre of head-piece of banner; other square; both retaining sewn to them frs. of printed silk gauze like Ch. 00306. Ground plain, pattern twill. Design: an elliptical spot, $3'' \times 2''$, formed of three flattened rosettes, six-petalled, centre one overlapping other two. See also in tabs of valance Ch. 00278. Head-piece base $11''$, h. $5''$.

Ch. 00250. Fr. of silk damask. Warp, light buff, prob. sized; weft, dark yellow, broad untwisted. Ground yellow twill, pattern buff twill, running in different direction. Design floral, too fragmentary to reconstruct. Condition good. $11\frac{1}{2}'' \times \frac{3}{5}''$.

Ch. 00251. Two frs. of silk damask, white, woven in heavy twill. Warp, fine and prob. sized; weft, a broad flat untwisted yarn, very lustrous and soft. Condition perfect. $3\frac{3}{10}'' \times 1''$ and $3\frac{1}{2}'' \times \frac{1}{2}''$.

Ch. 00252. Fr. of silk damask, white, in smaller twill. Warp and weft of equal size and quality, both unsized and untwisted. Condition perfect. $2\frac{1}{5}'' \times \frac{1}{2}''$.

Ch. 00253. Three frs. of plain silk, white, soft, generally of good even texture. Warp and weft equal in all respects. Condition good. Gr. M. $10'' \times \frac{9}{10}''$.

Ch. 00254. Four frs. of plain silk, white, very like to Ch. 00253, but slightly softer and more lustrous. Condition good. Gr. M. $6'' \times 1\frac{3}{5}''$.

Ch. 00255. Twelve frs. of plain silk, bright yellow. One fr. shows part undyed, attesting that dyeing followed weaving in this case. On undyed portion are traces of impression in red from stamp or seal. All frs. calendered more or less heavily. Condition perfect. Gr. M. *c.* $5'' \times 1\frac{3}{4}''$.

Ch. 00256. Nineteen frs. of plain silk, lemon yellow, fine. Warp and weft equal. Evidences of calendering. Condition perfect. Gr. M. $3\frac{3}{4}'' \times 2\frac{1}{4}''$.

Ch. 00257. Ten frs. of plain silk, pink. Very dull silk, calendered on one side. Rather loose and uneven weaving. Condition good. Gr. M. $13\frac{1}{2}'' \times 2\frac{1}{5}''$.

Ch. 00258. Seven frs. of plain silk, reddish-pink; like Ch. 00257. Condition good. Gr. M. $10\frac{1}{2}'' \times \frac{9}{10}''$.

Ch. 00259. Embroidered silk band of fine open-work silk gauze, sage-green; used as suspension loop for painting and much torn. Fabric is a true gauze, carried out in 'twined' weaving, which furthermore forms pairs of concentric lozenges at regular intervals in open-work ground. Many other frs. of like make are found (see Ch. 00337, etc.), and majority used for embroidery, though for this purpose it is still commoner to find the firmer variety of gauze, Ch. 00332.

Embroidery in Chinese style, worked solid in satin-stitch, and showing group of five plants, diminishing in size from centre. They have long pointed leaves, and tall feathery heads with blossoms in shaded orange and buff growing on each side; leaves in shaded bluish, sage, and yellowish-green. Part also of another group remains, showing rosette-shaped flowers with blue centres. $2'1'' \times 2''$. Pl. CX.

Ch. 00260. Hanging in silk embroidery, showing life-size *Śākyamuni Buddha on Gṛdhrakūṭa*. Ś. stands between a pair of disciples and Bodhisattvas; upper end of picture filled by canopy and floating Apsaras, lower by groups of kneeling donors and central panel for inscr. as in silk paintings. The ground is coarse natural-coloured linen, faced with light buff silk, which has mostly worn off in interspaces of figs. Design worked solid, in satin-stitch, throughout. Picture practically complete except for figs. of disciples who stand nearest Ś. and partly behind Bodhisattvas. These figs. fell along line of folding when hanging was put away, and have been for the most part eaten away.

Śākyamuni stands on lotus facing spectator, R. hand hanging stiffly by side with fingers stretched downwards and palm to side, L. hand at breast holding 'ear' of mantle, which is closely wrapped round arm. R. shoulder and arm bare; mantle folded closely about person, falling in point to mid-shin, beneath which appears light green under-robe reaching to ankles. Behind him circular halo in plain rings of variegated colours, and narrow oval vesica (also reaching

to ankles); latter again outlined by border of rocks representing the Vulture Peak.

The Bodhisattvas (prob. Avalokiteśvara and Mahāsthāma) stand turning $\frac{3}{4}$ towards him; that on L. (Buddha's R.) with hands in adoration; that on R. with both arms hanging but slightly advanced from elbows, R. hand turned palm out as in *vara-mudrā*, L. with back of hand outwards and all fingers doubled up except first. Their dress, orns., and coiffure are in 'Indian' Bodhisattva style as descr. in *Ch. lv. 0014, but without stoles and trimly drawn; their robes barely reach ankles. One has the *tilaka* on his forehead, the other a dark blue mark in shape of narrow leaf.

The disciples are shaven, haloed, and in monkish dress, their mantles barred with cross-stripes like Kṣitigarbha's in *Ch. i. 003, etc. Enough remains of faces to show that one (on Buddha's R.) was plump and benign in aspect, while other was lined and frowning. They prob. represent Śāriputra and Maudgalyāyana or Śāriputra and Kāśyapa. (For their possible connexion with the Good and the Evil Genius attendants in later paintings of Avalokiteśvara, see *Ch. 00102 and Petrucci, Appendix *E*, III. x.)

Canopy small and stiff example of type seen in *Ch. 002, etc., with jewelled chain and tassels; Apsaras have no wings, but float down with outspread arms, borne up by scrolled clouds and their billowing stoles as in Ch. xlvii. 001; liii. 001.

Below Buddha's feet, on R. and L., small seated lion of conventional type, with one forepaw lifted. Donors kneel at bottom in rows on either side of panel intended for dedicatory inscr. They consist on R. of a monk and three men, with boy attendant standing behind; and on L. of four women and small child, with young woman standing at back (see *Thousand Buddhas*, Pl. XXXV).

The men wear long belted light greenish-blue coats, and brown or indigo peaked and tailed caps; the women high-waisted skirts of brown, green, and blue, bodices with long close-fitting sleeves, and small shawl-like stoles. Their dress is absolutely plain; they have no jewels, and their hair is done in small top-knot on head without any orns. In colour, style, and absence of orn. dress thus presents a marked contrast to the elaborate dress of tenth-century donors in *Ch. 00102; lviii. 003, etc. Cf. above, pp. 851, 896.

The dedication has never been worked in; but of the narrow cartouches placed by each line of donors, the two foremost on the men's side have been filled in with Chin. chars. now illegible.

Silks clean and glossy, and work executed with great care. Colouring consists chiefly of pale creamy buffs, greys, and browns, dull green and pale yellow, with some pink (much faded), indigo blue and a lighter speedwell blue, throwing into relief glowing red of Ś.'s mantle and deep golden yellow of his shoulder, breast, and upper arm. His face, like the Bodhisattvas' flesh, worked in light buff, and also R. hand and forearm. Latter, moreover, are executed in thin rows of chain-stitch, unlike rest of picture. No black is used, the hair of Ś. and Bodhisattvas being deep indigo, that of women donors dark brown; the eyes dark brown, and outlines dark brown or indigo.

Mixture of Chinese and Indian elements in style similar to that in the silk paintings; but the Indian predominates owing to hieratic character of three chief figs., which show Chinese influence only in Bodhisattvas' faces. Śākyamuni's fig. appears in identical pose, dress, etc., in representations of statue shown by paintings Ch. 0059; xxii. 0023. *xiii.* For origin of common model and probably early date of hanging, cf. above, pp. 851, 878, 895 sq. 8′ × 5′ 4½″. Pl. CIV; *Thousand Buddhas*, Pl. XXXV.

Ch. 00278. Silk altar valance, composed of long band of silk fabric, to lower edge of which is attached series of hanging tabs and streamers of other silks. This valance is incomplete, the best parts having prob. been removed for use elsewhere. When complete it evidently had short plain curtain of silk hanging also from band and making a background for streamers as in Ch. 00279. It was then used to drape an altar, as often represented in Ch. silk and paper paintings. For valance of exactly same make, clearly reproduced, see paper painting Ch. 00400. *c*, and of silk paintings especially Ch. 00167 (Pl. LXI); lviii. 0011.

The tabs are triangular and made of single piece of figured silk, damask, or embroidery, lined with plain silk, and measuring 5″ in depth × 9″ to 10″ at line of attachment to band. Those preserved show no scheme of arrangement, but consist mainly of figured silk identical with Ch. 00227, damask like Ch. 00249, or printed gauze of the same pattern as Ch. 00306. Others are of pink silk gauze, showing frs. of flower and bird embroidery in dark blue, green, and pink. The streamers are composite, made of five or six small squares of plain or figured silk, folded and laid upon each other so as to form series of overlapping points. There were orig. more, but all ends incomplete. All streamers remaining are of uniform pattern, the silks in order downwards being white, light green, salmon-pink, dark green (printed) with quatrefoil rosettes in pink, and light blue damask with an occasional spot as Ch. 00343. They are lined with plain silk of dull pink. Great majority of both tabs and streamers, however, are gone, and those remaining are much stained and faded.

Chief interest of valance lies in band, which is made of pieces of a large-patterned silk, woven in same loose satin twill as Ch. 0076, with design in Turkey red, faded to orange, on a white ground. (The stuff, however, is reversible, and as the surface is much worn it has been reproduced in Plates from reverse.) Pattern consists of repeating elliptical 'spot', 2′ 1″ × 1′ 11½″, composed of central quatrefoil flower, surrounded by floral wreath of alternate palmette-shaped bunches of leaves and wide-open mallow (?) flowers, and an outer band of more complex open flowers of like kind with galloping deer.

The latter face each other in pairs across flower masses placed at top and bottom of ellipse, rearing up from those at sides, on which their hind legs stand. They are drawn in naturalistic style with striking vigour and sense of movement; and have antlered heads, goat-like beards, and bodies spotted with quatrefoils. Spandrels between these ellipses filled by lozenge-shaped 'spots' of entwined bands exactly

like those of Ch. 0086 (Pl. CXVII). The band was orig. lined with plain silk, pink and green, of which frs. only remain, but which prob. was continued to form short curtain below.

The vigorous movement of the deer is characteristically Chinese; in this, as well as in quatrefoils upon their bodies, they recall the galloping deer of an important brocade in the Shōsōin, and similar but winged deer on a painted cloth in the same collection (see *Shōsōin Catalogue*, ii. Pls. 98 and 121). The quatrefoils recall ornamental rosettes on shoulder and haunch of 'Sassanian' beasts. For relation of design to others suggesting 'Sassanian' influence, see above, p. 906; also Ch. 00291, 00304. a–b. Length *c.* 26', depth 1' 7". Pls. CIX and (reconstruction of deer design) CXIX.

Ch. 00279. Silk altar valance, like preceding but apparently complete, with silk curtain behind streamers preserved.

Main length of band made of dark crimson plain silk, with short sections at ends of plain white and dark greenish-blue silk. At L. end also section of fine dull pink damask woven with lines of quatrefoil and lozenge-shaped rosettes in twill. Suspension loops of figured silks are sewn along top; band lined with grey or green silk, to which is sewn curtain referred to above. This is also made of sections of various coloured silks, 10" to 12" wide, and comprising from L. to R.: fine gamboge damask, woven in lozenge lattice-work with spots in middle of lozenges, ground plain, pattern twill, much worn; plain white, yellow-ochre, lemon, pale sea-green, and maize silk; gamboge damask (repeated); plain leaf-green and sage-green silk. The white, maize, and sage-green silks very fine; others of coarser and less regular weave.

No definite scheme of shape or colour followed in arrangement of tabs and streamers, but a rich effect produced by contrast of varied hues of plain silks and of gay-coloured frs. of figured silks and embroideries. Tabs are set into band in close row, sometimes overlapping three deep, and forming a continuous series of points. The streamers, set at close but irregular intervals behind them, are sometimes made of single strips of silk or embroidery (either doubled on themselves or lined with contrasting silk, as are also the tabs); sometimes of contrasting silks or gauzes joined lengthways. There are only three of the composite streamers with overlapping points found in Ch. 00278. Some streamers are knotted, and many of them and of the tabs finished off by tassels of roughly cut strips of figured silks or by scraps of silk drawn up into a tiny bag. The latter were prob. make-weights, as they contain only rolled-up ends of same silk. Three or four are finished off in more striking fashion by small human figs. ingeniously made up of silk stuffed with hair or wool. The silk sewn up starfish-wise, and a strip of different silk added as girdle, pulling the fig. into shape. The head is made separately and sewn on, with tuft of frayed silk for hair, and the features in one case sketched with scarlet thread. (For possible significance of figs., see above, p. 900, note 15.)

The fabrics found amongst tabs and streamers comprise: (1) *Plain silks*: chocolate, lavender, crimson, plum-colour, yellow-green, bog-green, white, greenish blue, and a deep royal blue effectively placed upon the maize; these all of varying degrees of regularity and fineness of weave.

(2) *Damasks*: light green loosely woven, with open lozenge pattern in twill on plain ground; white, of same weave, pattern lozenge lattice-work with spot in middle of lozenge; dark purple with large pattern of scrolls and bracts woven in pronounced twill on close plain-woven ground; plum-coloured loosely woven, with a pattern of open lozenge diaper and spot; plum-coloured glazed, woven in small diaper of concentric lozenges as Ch. 00333; fine slate-blue with pattern of rows of hexagonal rosettes separated by lines of chevron bearing trefoils on points; lemon-yellow much perished, with pattern apparently of small rosette; and dark blue with lozenge (?) pattern.

(3) *Figured silks*: frs. of dark blue with buff spots, same as Ch. 00432; and another with scarlet ground and naturalistic flower and butterfly design in dark and light blue, and green, outlined in white. Only part of design preserved, resembling floral silk of banner-top Ch. i. 0011, and woven with broad untwisted weft on fine warp as Ch. 0076.

(4) *Printed silks*: several pieces printed with pinkish-red background and pattern of green intersecting scrolls.

(5) *Gauzes*: numerous pieces of black, crimson, plum-coloured, and light green woven in lozenge diaper or in twined weaving akin to Ch. 00332, but giving more ribbed effect. These have all been cut from large embroideries of Chinese design, worked in satin-stitch. The black shows claws of large bird in black and white, head and crest (?) of same, leaves, stems, and tendrils in shades of greenish blue, leaf-green, yellow, and salmon-pink; the crimson, parts of large naturalistic flowers in brilliant blues, green, white, and mauve; the purple, small lotus and parrot (?) design in shaded reds, blue, and green, the whole outlined with couched thread which must orig. have been covered with gold or silver leaf; very fine work.

Valance as a whole well preserved, though faded. Length 9' 4", depth 1' 5". Pl. CX.

Ch. 00280. Part of silk altar valance like Ch. 00278. Band made of green figured silk identical with Ch. 00295, much frayed, backed with soft thick silk of dull purple and plain brown silk. Continuous line of tabs preserved, and three complete streamers, besides topmost pieces of others alternating with tabs and detached remains both of band and streamers, much decayed. One streamer made of plain strip of same silk as band; others are composite, of ten pointed frs., comprising plain silks in white, lemon, and green; open-work embroidery fabric in black and purple; and fine damasks in indigo, pale blue, brilliant orange and pink. The pale blue woven with minute lozenge spot (as Ch. 00340); the indigo with elongated floral spot (as Ch. 00345); the orange and pink with repeating flower designs not completely recoverable.

The triangular tabs are of two varieties of figured silk: one same as Ch. 00181, the other of like weave, but showing a larger and more simple floral spot in terra-cotta red, yellow, and brown on creamy ground. One tab is a fr. of

coarse embroidery on bottle-green silk gauze, showing narrow leaves and flowers in dark green, salmon-red, buff, and light green, and bird's wing to R. in brown and faded pink. Length 4' 4", depth 1' 7".

Ch. 00281. Remains of embroidered silk hanging (?), of dark greenish-blue silk gauze backed with fine indigo plain silk. Very bad condition. Complete design now irrecoverable, but was an all-over pattern of birds, butterflies, and flowers on a small scale, in naturalistic Chinese style. It is worked through both gauze and silk in satin-stitch like that of Ch. 00119; chiefly in buffs, yellows, and terra-cotta, with green and white. Gauze of open lozenge weave, sewn to backing in strips *c.* 3" wide at top and widening to *c.* 6"; but direction of gores reversed in R. and L. parts of hanging, so that whole preserves roughly rectang. shape. 4' 10" × 3' 4".

Ch. 00291. Silk banner made in four sections with bamboo stiffeners at junctions. First section composed of two pieces of printed silk, the design on which can be completed from another piece of same in Ch. 00292. It is derived from a Sassanian type and shows within circular border a pair of deer facing each other on either side of a stylized tree, with cloud scroll below. Deer standing with one fore-leg lifted and muzzle raised; they have short necks, thick bodies spotted with pear-shaped spots, and horns sweeping back in long curve. Borders of circles studded with elliptical discs lying on their flattened sides, and having quatrefoil centres; similar quatrefoils lie between legs of deer.

The circles measured about 1' 10" in diam. when complete, and are repeated in rows, touching at their four cardinal points, where their circumferences are broken by sq. orn. uniting the two borders. Spandrels between circles filled by lozenge-shaped masses of semi-natural flowers and foliage, obviously resembling those of Ch. 00304 but preserved only in small part. Design printed in dark blue on (faded) pink ground; all contours white, and markings on deer white and yellow except for pear-shaped spots, which are white with pink centres. Spandrel orns. as far as preserved, white, yellow, and blue. Blocks well cut.

Regarding the design which shows transformation of a Sassanian model through Chinese workmanship, cf. above, p. 910. For attitude and figs. of deer, cf. figured silk reproduced in *Shōsōin Catalogue*, ii. Pl. 99; also Pl. 113.

The other sections of banner, triangular top and side and bottom streamers, are of various tones of faded buff or saffron plain silk. Length with streamers 8' 6½", width 10¼". Pl. CXIII, (reconstruction of design) Pl. CXVI. A.

Ch. 00292. Triangular head-piece from banner of printed silk, doubled, of same pattern as Ch. 00291; q. v. for descr. of design. This piece shows tree between deer, sq. orn. uniting borders of two circles, and point of spandrel orn. Less faded than Ch. 00291. Border is of plain saffron-coloured silk, side-streamers respectively of dark blue and sage-green silk. H. 8", base of triangle 1' 2".

Ch. 00293. a. Square of silk damask, salmon-pink, edges fringed; has been folded diagonally and made up with border, prob. into banner-top. Surface exposed faded to pale yellow and much worn. Part of design remaining shows fine peacock in profile to R., and on R. edge part of interlacing band pattern resembling Ch. 0086. Ground plain; pattern large twill. 11½" × 11". (Design) Pl. CXVIII.

Ch. 00293. b. Silk damask border of preceding. Warp, fine grey yarn, slightly stiffened; weft, broad untwisted dark blue yarn. Large pattern (section of which only is preserved) shows crested heads, and part of wings and tails of two confronting peacocks. These probably repeat, forming a variant of the Sassanian type of pattern. Ground plain; pattern twill. Poor condition. 2' 7" × 3½".

Ch. 00294. Triangular head-piece of silk damask from banner, saffron-coloured, well woven, with both ground and pattern in fine twill, but running in reverse directions. Bordered with plain silk of pale yellow and retaining ragged frs. of body and side-streamers of dull fawn. Basis of damask design is obviously chevron bands enclosing rosettes, a simple form of which is seen in Ch. 00342. b (Pl. CXXI). But here the rows of rosettes widely separated, and chevron band transformed into band of conventional floral orn. 1' 9" (width) × 11" (height). (Design) Pl. CXXI.

Ch. 00295. Two strips of figured silk (suspension loop and streamer from valance Ch. 00280 ?). Loose satin weave as Ch. 0076, but considerably finer texture. Surface faded and worn. Ground dark green, pattern pale and bright pink; also dark brown not appearing on surface in these frs. Larger fr. shows series of palmette-shaped semi-natural floral motifs; smaller fr. edge of larger motif of same character. Both too small for reconstruction of design. 1' 2½" × 2¼" and 7" × 1⅜". Pl. CXII.

Ch. 00296. Suspension loop of figured silk, badly worn and faded. Very loose satin weave as in Ch. 0076. Weft of deep and pale blue, light green, tomato red, white, and pale yellow, but design indistinguishable except for large red-and-blue-petalled flower. 8⅜" × 2" (unpicked). Pl. CXII.

Ch. 00297. Suspension loop of figured silk, taken from banner Ch. lv. 006; fairly preserved. Fine double cloth, closely woven in a small diaper of concentric lozenges. The colour pattern, which ignores that of weave, is a sq. trellis-work of gamboge lines, ¼" wide and ½" apart; field of squares thus enclosed terra-cotta; small squares at crossings of trellis, dull brown orn. with a rosette in white spots. Selvedge one side. 7" × 1½" (unpicked). Pl. CXII.

Ch. 00298. Fr. of silk braid, plaited with thick soft yarn in zigzag lines of white, light green, and deep yellow. Firm and elastic. For braids of same character as ties of manuscript-roll covers, see *Shōsōin Catalogue*, iii. Pl. 166. 8½" × ⅝". Pl. CXII.

Ch. 00299. Fr. of silk braid, plaited in a vandyke

pattern with white, scarlet, and dark blue yarn; cf. the preceding. 3" × ⅝". Pl. CXII.

Ch. 00300. Strip of silk tapestry, full orig. width, fine, hand-made, like Ch. 0058. Pattern: an elongated elliptical spot occupying full width of strip and repeating vertically at intervals of 1". Between appear pairs of half-spots, touching horizontally, and with their long diagonals lying along edges of strip. Spots composed of conventional scroll and leaf forms, worked in white, yellow, green, dark brown, and buff on soft blue ground. Colours faded. Strip has been used for suspension loop and worn through. For other tapestry strips of like character, see Ch. 00166, 00301, and manuscript-roll cover Ch. xlviii. 001. 7½" × ⅝". Pl. CXII.

Ch. 00301. Two frs. of silk tapestry, like the preceding in make and pattern, but coarser. Ground salmon-pink; spots dark brown, white, greenish yellow, and true green, or dark brown, white, pale and royal blue. Each 2½" × ¾". Pl. CXII.

Ch. 00302. Strip of figured silk, frayed. Loose satin weave as Ch. 0076. Pattern too fragmentary to reconstruct; in pale green, dull brown, white, and blue on scarlet ground. Colours brilliant. 8½" × ¾". Pl. CXII.

Ch. 00303. Silk banner with Chin. inscr.; complete except for side streamers, and made throughout of indigo blue silk. In place of bottom streamers it has undivided length of silk, to which weighting-board is attached in usual fashion. Condition good.

Subject: *Bodhisattva of the Sun*; inscr. reading *Jih yao p'u sa.* Stands facing spectator on lotus rising from water of tank, with decorated railing in background. Hands together at breast support disc containing Sun-bird, a two-legged cock outlined in red. Dress consists of long skirt held by draped girdle at hips, and gathered short of ankles in voluminous light folds, and of band of drapery across breast. There is no stole, but two streamers of drapery fly from head-dress to elbows. Hair drawn up from forehead and done in very high top-knot almost covered by elaborate tiara orn. with flowers and large trilobate jewel in front. Elaborate armlets are also worn, besides usual necklace, bangles, and earrings. Face large oval with half-closed level eyes. Behind head circular halo with flame border, and above an elaborate draped valance.

Fig. is drawn throughout in white outline only, and not painted except for the touching-up of jewels and flowers in yellow, floral spot patterns in yellow on robe and breast draperies, outlining of cock in red, and solid painting of lips in same. Inscr. appears on cartouche to R. of head.

The lower part, replacing streamers, shows a repeating diamond spot pattern also outlined and probably stencilled in white. The spots are *c.* 9½" from tip to tip, and are composed of pairs of naturalistic geese (also birds of Sun) facing each other and surrounded by foliage. For a closely resembling pattern, cf. Fenollosa, *Epochs of Chinese and Japanese Art*, i. p. 110, on a fabric of Shōsōin Collection. Head-piece has also lotus flower and leaf design in white; weighting-board painted with conventional rosettes in green and black on red.

Whole design of banner is repeated on back, but not traced through as in the case of gauze paintings, so that position of parts is not reversed: e.g. the cock looks to L. on each side, and inscr. space is on R. edge. Workmanship rapid and by a well-practised hand.

Length of whole 7', width 9½". ('Goose design' of lower part) Pl. CXIII.

Ch. 00304. a–b. Two head-pieces of printed silk from banners, edged with fine lozenge-diapered sage-green silk, and retaining part of faded brown side streamers and one set of sage-green silk bottom streamers. Printed with large repeating design derived from a Sassanian type, reconstructed in Pl. CXIV, and consisting of circular medallions, about 1' 9" in diam. when complete, set out in rows on indigo ground; spandrels between them filled by lozenge-shaped masses of flowers and feathery leaves.

The sides of these lozenges are hollow and their points all but meet, so that they practically enclose the circles. Middle of circle is occupied by complex four-petalled flower, trilobate petals, and field by four pairs of confronting geese standing on open flowers, each pair separated from the next by a green floral motif. Borders of circle orn., inner with quatrefoils, outer with elliptical discs which have flattened rosette for centre and a bead border. Ground of circle white; of spandrel orn. white and yellow; other colours used are indigo, purple, green, and red, discoloured in places. *a* retains suspension loop of red silk and strainer.

Mixture of Sassanian and Chinese elements obvious in design (see above, p. 911). Chinese style clearly marked in semi-natural treatment of lozenge-shaped floral spot and of central flower, and especially in the geese, which are quite naturalistic. The rigid definition of circles, however, preserves stiffness of design as a whole, and this is emphasized by formal treatment of discs on border. H. (*a*) 7½", (*b*) 8⅜"; bases (*a*) 1' 1½", (*b*) 1' 3½". Pl. CXIII and (reconstruction of design) CXIV.

Ch. 00305. Two frs. of printed silk, plain weave. Pattern: a diaper of red, green, and blue four-petalled rosettes, the red forming every second row, while the intermediate rows are formed of green and blue rosette (with red centre) recurring alternately. Red rosettes placed straight, green and blue diagonally (in St. Andrew's cross fashion). Interstices filled with elongated dark brown hexagons, placed sideways or on end in alternate rows. Outlines of hexagons, dark blue; of rosettes, white or natural colour. Somewhat discoloured. 1' × 3½" and 6" sq. Pl. CXIII.

Ch. 00306. Three frs. of fine silk gauze, woven in small lozenge diaper, and printed with maroon background and scattered bunches (fragmentary) of large crimson and blue flowers, outlined white, and dark green leaves, outlined yellow. Outlines strengthened in places with lines of silver-grey paint or paste. Background between floral pattern covered with further design in same paint, consisting of small

hexagonal diaper containing circular many-petalled rosettes, with trace at edge of larger pattern. Gr. fr. $10\frac{1}{2}'' \times \frac{7}{8}''$. Pl. CXIII.

Ch. 00307. Part of silk banner. Head-piece of faded red silk, bordered with spotted snuff-coloured silk damask like Ch. 00358, 00371. Body of soft thin printed silk, woven in small lozenge lattice-work like Ch. 00306. Printed pattern also lozenge lattice-work, on large scale; the diagonals formed of series of curling green leaf-scrolls with pink flowers filling hollows, and pink rosettes at points of junction with other scrolls. Lozenges formed by these scrolls filled with lozenge-shaped masses of similar pink flowers and green leaves. Ground, soft dark blue. $7\frac{1}{2}'' \times 1' 1''$. Pl. CXIII.

Ch. 00308. Fr. of printed silk, plain weave. Complete pattern not recoverable, but contained alternating large and small hexagonal flowers, and naturalistic leaves radiating round former. Printed with indigo ground and buff pattern; outlines natural colour of silk. Centres of large flowers and body of some leaves, indigo. $8'' \times 2\frac{1}{2}''$. Pl. CXIII.

Ch. 00309. a–b. Frs. of printed silk, soft, plain weave. Pattern: repeating lozenge-shaped floral spot, printed in soft blue and pink with pale yellow ground. Outlines and veining of spot natural white of silk. Faded. (*a*) $9\frac{1}{2}'' \times 5''$, from body of banner; (*b*) forming border of banner head-piece with white silk centre, h. 10″, base 1′ 6″; also detached frs. $1\frac{1}{2}''$ sq. Pl. CXIII.

Ch. 00310. Strip of printed silk, loose plain weave. Pattern: repeating lozenge-shaped floral spot, printed with light green quatrefoil centre and pink-centred petals on natural white of silk. Ground printed carmine. Colours fresh. $1' 2\frac{1}{4}'' \times 1\frac{1}{2}''$. Pl. CXIII.

Ch. 00311. Strip from edge of finely woven grass mat; string warp, double weft, remains of purple silk binding on edge. Silk a very fine damask with plain ground and small scattered hexagonal rosettes in twill. Mat firmly and evenly woven. Gr. M. $3' 3\frac{1}{2}'' \times 2\frac{3}{4}''$. Pl. XLIX.

Ch. 00312. Seven frs. of silk gauze, dark pinkish purple or plum colour. Plain open-work ground. Pattern: geometrical lattice-work on basis of lozenge, but with lozenges converted into octagons by blocks of five short parallel lines which thicken crossings of diagonals. Within octagons so formed are smaller octagons in outline. Gr. M. $3\frac{3}{8}'' \times 1\frac{1}{2}''$. Pl. CXX.

Ch. 00313. Five frs. of silk gauze, dark purple, with ground of plain open weave. Pattern (incomplete) contains chevron band between pearl borders with double line on inner side. Bands orn. with series of alternate Svastikas and equal-armed crosses, the latter having their angles filled in with cluster of four small squares. The chevron bands prob. repeated, touching at their angles and forming lozenge diaper as in Ch. 00240; for several of frs. show part of rosette filling angle of chevron. Gr. M. $3\frac{1}{2}''$. (Design) Pl. CXX.

Ch. 00314. Three frs. of plain silk, dark pinkish purple, soft. Signs of calendering. Gr. M. $4\frac{1}{4}'' \times 1\frac{1}{4}''$.

Ch. 00315. Misc. frs. of plain silk, dull pinkish purple, thick and soft, rather loosely woven and showing calendering in places. Gr. length 13″.

Ch. 00318. Triangular fr. of plain silk from banner-top. Faded pink; thin, fine texture. Condition good. $10'' \times 4\frac{1}{4}''$.

Ch. 00319. Banner streamer and fr. of another of plain thin silk, of pale pinkish sienna. Ends finished in point, with tiny tassels. Condition good. 3′ 9″ and $5\frac{1}{2}'' \times 2\frac{1}{2}''$.

Ch. 00320. Fr. of ribbed silk, rich pinkish red. Warp arranged with two fine yarns between two thick; weft fine and equal. Well preserved. $10\frac{1}{4}'' \times 1\frac{1}{2}''$.

Ch. 00321. Four frs. of plain silk, pinkish grey, thin, finely woven, portions of borders from triangular tops of small banners. Very ragged. Some retain pointed ends with small tassels of blue silk, and one the hanging loop of yellow silk. On this one is Chin. char. in ink. Faded and torn. Side of triangles *c.* 12″.

Ch. 00322. Two frs. of silk, finely ribbed, crimson, much discoloured. $7\frac{1}{2}'' \times 1''$ and $4\frac{3}{4}'' \times 3''$.

Ch. 00323. Six frs. of plain silk, dark dull purple, very finely woven. Highly glazed on one side. Condition perfect. Gr. M. $5'' \times 2''$.

Ch. 00324. a–b. Two frs. of flimsy silk gauze, indigo and sage-green, in variety of twined weave akin to Ch. 00259, etc. Green fr. shows very roughly formed rosettes at regular intervals and is from banner streamer. (*a*) $5'' \times 3\frac{3}{4}''$; (*b*) $10'' \times 2''$.

Ch. 00325. Eleven frs. of plain silk, grass-green, rather coarsely woven with uneven yarn. Soft, lustrous, and well preserved. Average $1\frac{1}{2}'' \times 1\frac{1}{2}''$.

Ch. 00326. Seven frs. of plain silk, chrome yellow, of similar texture to Ch. 00325, but less lustrous. Signs of calendering. Generally well preserved. Gr. M. $5\frac{1}{2}'' \times 2\frac{1}{2}''$.

Ch. 00332. Misc. frs. of silk gauze, dark plum-coloured, soft and thick, showing very complicated form of twined weaving. Numerous specimens woven in slightly varying styles occur amongst Ch. fabrics, mostly in frs. of embroideries, the combined softness, firmness, and openness of fabric making it very suitable for this purpose, especially when backed with thin plain silk of a like colour. Larger frs. of Ch. 00332 in this way lined with soft plain purple silk; one or two show at edges four-clawed paws and back of embroidered dragon (?), prob. whirling in circle as in Ch. 00179. Dragon worked in satin-stitch in pale buff or white silk with red band along back; outlines gold paper couched with red thread. Very fragmentary. Gr. M. $7\frac{3}{4}''$.

Ch. 00333. Three frs. of closely woven fabric, prob. linen, dark yellow-brown. Pattern fancy twill, woven

in diaper of concentric lozenges developing into a key pattern and herring-bone arrangement. One side glazed. Well preserved. For similar patterns see Ch. 00430, 00499, 00500. Gr. M. $7\frac{1}{2}'' \times 2\frac{3}{8}''$.

Ch. 00336. Three frs. of silk gauze, dark purple, ground woven plain as in Ch. 00312. Pattern: a lozenge lattice-work, diagonals formed of a series of rather widely scattered Svastikas and small squares, with a kind of octagon at crossings. Within spaces thus formed are lozenges with cross or quatrefoil in middle and border subdivided into squares. Design a variant of Ch. 00346, *q. v.* Gr. M. 1′ 1″. (Design) Pl. CXX.

Ch. 00337. Section of silk gauze from banner. Strainer wound with yarn and remains of adjoining sections of blue and yellow silk at ends. Gauze tawny brown, sized, woven in a variety of lozenge lattice-work enclosing smaller lozenges, on open ground. See Ch. 00259. $8\frac{3}{4}'' \times 6\frac{1}{4}''$. (Design) Pl. CXX.

Ch. 00338. Fr. of silk damask, faded brown. Pattern shows interlacing elliptical rings, each overlapped by six surrounding rings so as to leave hexagonal central space. In this a lozenge-shaped spot. Ground plain, pattern twill. $10\frac{1}{4}'' \times 9\frac{3}{4}''$. (Design) Pl. CXXI.

Ch. 00339. Silk banner, complete except for weighting-board and one streamer. Body made of one piece of old-gold silk damask (discoloured) of same pattern as Ch. 0086 and in good condition; triangular top of dull brown silk damask, frayed, pattern irrecoverable; border of plain light red silk (discoloured), and suspension loop of pink and white printed silk. Streamers of fine dark blue silk damask; side streamer shows row of spots composed of pair of long-winged birds clinging to either side of leafy spray, which branches over their heads. Bottom streamers show somewhat similar floral spot. Ground close plain weave; pattern twill; cf. Ch. 00345. Length of whole 4′ 9″, width 7″. (Design of blue damask) Pl. CXXI.

Ch. 00340. Banner streamer of silk damask, fine, yellow-brown, woven with small spot of concentric lozenge. 1′ 9″ × 2″. (Design of damask) Pl. CXXI.

Ch. 00341. Two banner streamers of silk damask, thin, snuff-coloured, woven with small quatrefoil spot. 2′ 1″ × 2″. (Design of damask) Pl. CXXI.

Ch. 00342. Silk banner, complete; body made in three sections of plain silk, upper blue (two varieties), middle white, lower dark red; strainers at junctions of sections lost; bottom streamers blue; wooden weighting-board painted on each side with row of enclosed palmettes in red and black. Triangular head-piece of open silk gauze painted on each side with lotus and leaves, outlined red, with brown and white petals on light red ground. Border of light red plain silk with Chin. char. on each side; suspension loop of cream silk gauze. Side streamers of thin blue silk damask of different patterns; (*a*) large concentric-lozenge diaper, loose weave; (*b*) bands of chevrons (three lines in each) meeting at points, with elongated quatrefoil rosette in lozenges thus formed. Ground fine plain weave pattern twill. Glazed one side. Length of whole 4′ $2\frac{1}{4}''$, width 6″. (Design of damasks) Pl. CXXI.

Ch. 00343. Banner streamer of silk damask, fine, dark blue, generally resembling streamers of Ch. 00339. Elliptical spot formed of two flowers in profile between leaves. 2′ $9\frac{1}{2}'' \times 2\frac{1}{4}''$. (Design of damask) Pl. CXXI.

Ch. 00344. Tab of silk gauze from valance streamer. Woven in small lozenge diaper, open-work ground. Bright terra-cotta. Length $3\frac{3}{4}''$. (Design) Pl. CXX.

Ch. 00345. a–b. Two frs. of silk damask, fine, dark blue. Pattern: roughly elliptical spots formed of groups of four open lozenges filled and surrounded by lozenge-shaped leaves, and occurring in rows 4″ apart. Spots in each row *c.* $1\frac{1}{8}''$ apart. In alternate rows spots are of same character, but based on two lozenges only. Ground close plain weave; pattern twill. Both *c.* 1′ $7'' \times 11\frac{1}{2}''$. (Design) Pl. CXXI.

Ch. 00346. Fr. of silk gauze, dark purple, ground plain-woven like Ch. 00312, etc. Pattern: a large lattice-work formed of lines of Svastikas, with circular rosette in lozenges thus formed. At crossings of diagonals Svastikas interrupted by equal-armed crosses with angles filled in as in Ch. 00313. Gr. M. 8″. (Design) Pl. CXX.

Ch. 00347. Three frs. of silk embroidery, on strong black silk fabric exceedingly closely woven in diaper of concentric lozenges. Surface glazed. Apparently cut from band, $1\frac{3}{4}''$ wide, for which embroidery was designed. It consists of triangular trilobate leaves, placed alternately along upper and lower edge and pointing inwards towards each other. Leaves worked solid in satin-stitch like that of Ch. 00119; on one edge in shaded red, rose-pink, and pale pink; on other alternately in shaded blue and shaded green, darker shade always in centre. All leaves outlined with gold or silver leaf (silver now black), and couched, gold with red, silver with white, thread. Thoroughly Chinese style. Colours very fresh, and fabric in good condition. Gr. M. 7″. Pl. CX.

Ch. 00348. Frs. of silk embroidery, on black silk gauze backed with olive-green silk. Torn remnant shows only stray leaves and blossoms in naturalistic Chinese style, worked solid like preceding in shaded greens, tomato red, yellow and purple, white, royal and pale blue. Careful work. Gr. M. $3\frac{1}{2}''$. Pl. CX.

Ch. 00350. Large silk painting representing *Buddhist Paradise and scenes outside*, of type not elsewhere found in Collection; cf. above, pp. 890 sq. Much broken at bottom, and to some extent at top, but otherwise in fair condition and retaining orig. fawn silk border.

Its most conspicuous feature, as compared with Paradise pictures descr. under *Ch. 0051, etc., is the absence of a central predominant fig., of side-scenes, and of rigid symmetry and centralization. Exact subject uncertain, but chief scenes are as follows:

(i) *Inside the Paradise.* This occupies upper third of picture and takes place behind a high wall with battlemented top which runs across it from side to side. Two or three inches from each edge the wall turns and comes forward, and at corners within wall are watch-towers or pavilions; while in middle of main line of wall is a strong gate-tower of green tiles, with double doorway and chamber above, as in Ch. lv. 0016, etc. Wall itself painted also in same way in horizontal stripes of yellow and red.

Inside appears (in middle, above) a small Buddha, seated, with attendant Bodhisattvas on mat or platform behind an altar. Buddha seated cross-legged, with R. hand at breast, thumb and third finger joined, and L. hand in lap. In front five men, in Chinese jackets and skirts, and with three-lobed crowns or lotus flowers on their heads, kneel offering flaming jewels on draped and tasselled cushions (or small canopies with jewelled tops?). In R. and L. corners are similar groups of seated Buddhas with attendant Bodhisattvas; the Buddha in L. corner having R. hand in *vitarka-mudrā*, L. in *bhūmisparśa-mudrā*; the Buddha in R. having R. hand at breast, open (in *abhaya-mudrā*?), L. in lap, and three begging-bowls on altar. The altars of other two empty.

There is no lake; red-flowering plants scattered on background denote grassy ground. By each of pavilions above referred to, at turns of wall, stands, moreover, a man in Chinese dress holding out his R. hand, from which rises a cloud. The object supported on cloud is, on R., completely effaced, though a kneeling Bodhisattva remains sweeping towards it on cloud with hands in adoration. On L. the cloud supports a symbol of Universe—Mount Meru with Chinese houses on top representing the world of man, and discs of Sun and Moon on either side. To R. of Mount Meru an object of uncertain significance; but apparently representing wall or parapet running with recessed angles from L. to R., and containing within a series of round-ended objects set close together on their edges—perhaps rocks. The wall leads to nothing at either end, but stops short; its connexion with adjacent figs. or objs. is obscure.

(ii) *Outside the Paradise* are a number of scenes, half secular, half celestial, running into each other and difficult to demarcate satisfactorily while the subject is unknown.

On L. in corner made by Paradise wall, a middle-aged bearded man, in jacket and under-robe, reclining on a couch or mat under an erection which generally resembles a four-post bed. The flat top has a valance round the edge, and heavy purple curtains are tied back to posts. A man and woman walk away from him to middle of picture.

Round foot of four-post erection (which appears to be two-storied, with the couch in the upper half, but the construction is not clear), stand four Lokapālas, haloed and in scale-armour as in banners. (See *Ch. 0010.) Vaiśravana recognizable by halberd and Stūpa; his coat of mail reaches to ankles. Scale doublets of others reach only to knees, and the attributes of two are destroyed; but Virūpākṣa is distinguishable by his sword. Beside erection, and to R. of them, an altar with sacred vessels; six Bodhisattvas in adoration, kneeling on cloud, sweep down towards it from middle of picture. A single Bodhisattva in same fashion approaches the Kings.

On R. the four-post group is replaced by a Bodhisattva seated cross-legged on lotus under canopy and red-flowering trees. Lotus is placed on square sitting-platform, whose fore-corners are supported by a carved lion and deer (?) or ram. In front an altar (as on other side of picture); beyond Bodhisattva, a man and woman (also as on other side); behind him, four haloed Kings in armour; and below, smaller seated Bodhisattvas and three small Buddhas, sitting apparently at separate altars, half effaced.

The figs. occupying lower third of picture are mainly secular, and the grouping still more uncertain. They seem to have run (roughly) in two rows; lower of which is almost completely destroyed, but retains at R. end two cartouches for inscr. (blank). In upper row figs. are as follows, beginning from L.:

(1) A personage in red coat and high head-dress advances towards middle of picture, holding out flower (?) in L. hand. Umbrella held over him by man behind; behind again group of ten other men in secular dress. On either side of his path in front, a servant in long dark pink coat and flat pink cap, bowing. He advances towards a larger fig. which crouches on knees and L. hand upon a mat, holding out R. hand towards him. This fig. is clad in a red skirt or loose red trousers and short yellow and green jacket with long sleeves; he has short black hair, a full clean-shaven face, and no halo or emblem of divinity. Behind him a short way off are two Bodhisattvas kneeling with hands in adoration.

(2) Beneath these another Bodhisattva, facing other way towards group of persons advancing from R. side of picture. This Bva. is standing, and emptying the contents of a begging-bowl which he holds out upside-down in his hands. The stuff poured out forms a green mound reaching as high as his waist. Immediately in front of him painting broken away, but beyond approaches a group of persons, evidently attendants on central fig.—a portly middle-aged man in under-robe, long jacket, and trencher-shaped cap. Two little boys walk on either side of him supporting his hands; then two men, with sleeveless tunics of scale-armour over their under-robes and jackets, who hold long fans on poles meeting over his head. Behind and in front are more men, some carrying the officials' baton or roll of paper; amongst the foremost a boy, carrying with both hands above his head some large object (now broken away).

In bottom corner, on L., are remains of smaller figs. of men about low platform set out with offerings on black dishes; and of another man seated or squatting with red bird (?) beside him.

Amongst men's dress are instances of long belted coat close to neck, and tailed black cap of Ch. xx. 008, etc.; but they are rare. Coats of majority cut open, with lapels on the breast. Sleeves narrow and very long, reaching far beyond hand; in case of the two bowing men in (1) coats have fur collars and cuffs. Head-dresses are of varying shapes, some flat projecting at back, some (roughly) mitre-shaped. The garments are all coloured red, dark pink,

yellow, or light green; the black long-skirted coat and wide black hat customary amongst the donors of *Ch. 00102, etc., are nowhere seen. Two men standing in scenes just outside Paradise wear monkish under-robes and mantles, and their wives the ordinary skirt and wide-sleeved jacket with hair done in two high loops like the Wife's in Ch. 00114, etc. The Bodhisattvas' dress and orns. are of the more 'Indian' type (see Ch. *0051; lv. 0014), but with no stoles.

Colouring on dress, buildings, etc., is limited to red, dull purple, green, and orange on greenish background, with black only on hair of figs. and on bowls; all flesh-colour has gone except remains of yellow on Buddhas. Workmanship of second class.

c. 4' 10" × 4' (with border). Pl. LXXVI (bundle unopened).

Ch. 00351. Fr. of silk damask, fine, yellow, much decayed. Pattern of interlacing stems forming rows alternately of open lozenges or elongated hexagons; in latter and at junctions of lozenges rosettes. 8½" × 7½". Design resembles that of damasks, T. XIV. v. 0011. a–b, of T'ang period. (Design) Pl. CXVII.

Ch. 00355. Silk painting representing *Kṣitigarbha* as Patron of Travellers and Protector of Souls in Hell, with attendants and donors. Complete except for border; condition fair, but colour much gone. For similar representations see under *Ch. 0021; also above, p. 866.

K. sits facing spectator on Padmāsana with metal base; R. foot resting on ground on small lotus, L. bent up, but second small lotus ready for it below. R. hand open on knee with middle fingers bent up; beggar's staff (headless) rising from between fingers on rev. but not shown at all on obv. L. arm bent up at elbow and hand held outwards, thumb and third finger joined, with traces of flaming crystal painted in behind.

Dress and type of face as in *Ch. 0021; but mantle bright crimson with cross-bars and borders left in greenish grey of silk; under-robe dark olive-green with flower-spot in red; head-shawl dark pink and green; flesh brownish flesh-colour with black outlines. Circular vesica of petal and vandyked ray orn., and halo of waving rays, with yellow flame border.

Down sides sit the Ten Infernal Judges, the tenth alone in armour, and alone judging a soul. The rest sit with hands in adoration behind their benches, on which are brazen altar vessels instead of scrolls; all in magisterial dress with varied head-dresses of the types seen in Ch. lxi. 009. Beside each stand two attendants with their hands in adoration or folded in their sleeves; their dress and coiffure of (apparently feminine) type seen in Ch. xxviii. 003. Below K.'s L. knee is the kneeling priest; the lion does not appear.

The donors kneeling on mats at bottom—two men on R. and two women on L.—are of the *Ch. 00102 type; women's cheeks highly coloured and head and face of one drawn with considerable charm.

Dedication panel and cartouches placed beside donors and attendant figs., all blank.

Workmanship indifferent; original tracing as seen on back extremely rough, and outlines on obv. mostly redrawn in ink, but carelessly. Especially noteworthy is omission of K.'s emblems in this retouching, showing artist's lack of understanding of his subject. But function of judges lost sight of even in orig. tracing, where brazen vessels transform their benches into altars; they themselves, devoid of their rolls of office, have adopted pose of subsidiary adoring Bvas. in Paradise pictures. The absence of white lion and its characteristic rock-altar or rock-throne also unusual. 2' 5" × 1' 10".

Ch. 00356. Paper painting showing *Buddha* with donors. Mounted on paper backing, with paper border painted black and red. Above, Buddha seated on variegated lotus, legs interlocked with soles up, R. hand in *vitarka-mudrā* at breast, L. horizontal below it. Donors below, kneeling; man and boy on L., woman and boy on R. Dress and accessories of Buddha, dress of donors, etc., in style of silk painting *Ch. 00102, etc., but coarse workmanship. Colouring restricted to dingy crimson, green, slate-blue, pink, yellow, and black. (With border) 1' 8½" × 1' 4½".

Ch. 00357. Part of silk banner composed of two pieces of silk, showing selvedge on each side. Width of silk 21". Upper piece dark salmon-pink, plain; lower printed, showing on blue ground pairs of thick-set trotting ponies, facing each other, pink with white markings. Heads have indication of bridle. Upper pair have white throat and belly, white pear-shaped spots with pink centres on sides, and pink Svastika outlined white on quarter. Heads missing, partly taken up in joining seam. Lower pair, directly below, are similar, but without pear-shaped spots; heads and bodies of distinctly Mongol type. Mane white, ears short, hair full on forehead. At lower edge of piece are feet of a third pair, upside-down in relation to pairs above. Pairs of ponies occupy full width of silk, and strips of yellow silk sewn to upper and lower edges indicate continuation of banner in both directions. Fair condition. For design see above, pp. 910 sq. 4' 3½" × 1' 9". Pl. CXVI. A.

Ch. 00358. Silk banner, much torn; bottom streamers and one side streamer lost. Triangular top, as in Ch. 00307, of light red silk bordered with snuff-brown spotted silk, and side streamer of the same. Body composed of three pieces of printed silk sewn end to end; uppermost, fine lozenge diaper identical in weave and printed pattern with Ch. 00307.

Below are two pieces printed with green ground and almost circular spots, *c.* 6" in diam., made of wreath of flowers and stalks encircling two flying birds. Spots printed in light brown and repeated on diagonal plan with very conventional butterflies at sides of each. Birds in large spots are long-tailed, whirling head to tail in circle like lions of Ch. 00179 (q. v. for further references). 2' 5" × 11". (Design) Pl. CXXIII.

Ch. 00359. Triangular head-piece of figured silks from banner, bordered with plain silk of faded saffron. Suspension loop of coarse linen; remains of streamers made of small pieces of white and yellow silk, lined with silk of greenish yellow, to which is sewn top of painted silk gauze showing halo of missing fig.

One fr. of figured silk (*a*) is of 'Sassanian' deer pattern of

Ch. 009, q.v. for fuller descr. Body of deer here preserved, deep yellow, with reddish-pink rosettes outlined with white and green on haunch and shoulder. Other fr. (*b*) shows a like pattern of rounded hexagonal medallions, *c.* $4\frac{1}{2}'' \times 4\frac{3}{8}''$, containing pairs of confronting ducks on ground of faded salmon-pink. Outlines stepped throughout; weave and texture of same character as in Ch. 009. Birds stiff, but exceedingly life-like considering style of weaving used; their bodies dark blue, their heads, necks, and legs dark green, eyes pink, beaks white, wings light yellow curled up at end, and tails done in diagonal stepped stripes of dark blue and white like those of geese in Ch. 009. A pink cross outlined with white marks shoulder.

There are no palmettes under their feet, but in interspaces above each pair of medallions are traces of large pale yellow palmettes which prob. supported larger pairs of animals. Medallion borders are green, orn. with six evenly spaced pink lozenges with yellow outlines and blue or green hammer-armed cross in centre. Lozenge pairs above and below separated resp. by leaf or tree-shape like a spear-head, and the others by stepped bands running diagonally across border. Both trees and bands are also pink outlined with white or yellow. For relation of fabric to others with 'Sassanian' designs, see above, p. 909; it ranges with the 'Oxus group', whose characteristic weave, spacing of design, and colouring it shows. Condition good. (*a*) $8\frac{1}{2}'' \times$ (gr. width) $2\frac{3}{4}''$; (*b*) 6" × (gr. width) 4". (Reconstruction of designs) Pl. CXV.

Ch. 00360. a–g. Seven silk banners, whole or fragmentary, made on same pattern, of plain and printed silks. Head-piece of white silk, doubled, printed with lozenge-shaped conventional bunches of blue or green flowers recalling cornflowers, with yellow centres. Border of head-piece, light terra-cotta. Body in four sections stiffened with bamboo slips at seams and made resp. of terra-cotta, fawn, printed, and fawn silk. The printed silk has light terra-cotta ground, sprinkled with conventional lozenge-shaped rosettes or flower-bunches in blue, pink, and yellow with dark green centres and natural-colour outlines. Side streamers, where preserved, of dark blue, bottom streamers of light brown silk. All silks of thin light quality but evenly woven; printed silk of head-pieces clean, fresh, and whole in all; printed silk of lower section full of holes in almost all banners, owing to rotting of green centres. Length (without streamers) 4′ 6″, width $10\frac{1}{2}''$. (Printed design of head-piece) Pl. CXXIII.

Ch. 00361. Fr. of figured silk; thick, soft, woven in satin twill as in Ch. 00228, etc. Thin twisted warp, dark blue; broad untwisted weft of indigo (ground), bright pink, grass-green, white, golden yellow, pale blue, and salmon-pink (pattern). Design seems to have consisted of repeating floral spot, in rows about 4" apart, with outspread bright pink flowers, yellow-centred, and outlined with white, on thread-like white stems. Green, pale blue, and salmon do not appear on surface in fr. preserved. Excellent condition. 1′ × (gr. width) $\frac{5}{8}''$.

Ch. 00362. Fr. of figured silk, perhaps from same piece as Ch. 00180, with which it is identical in colour, yarns, and weave. No trace of animal design, but in corner part of floral spot in bright pink, green, yellow, and white; ground light blue. Has been folded in band, and part exposed is much faded. $9\frac{1}{2}'' \times 4\frac{1}{2}''$.

Ch. 00363. Fr. of figured silk, thick and soft. Woven in satin twill; warp, fine twisted yarn; weft, broad, flat, and untwisted. Colouring rich and well preserved, comprising (ground) deep plum-colour, (design) chrome and lemon yellow, white, grass-green, and scarlet, the two last colours not appearing on the surface in the piece preserved. Fr. of pattern remaining shows ends of wings, prob. from bird spot pattern like Ch. 00228. $3\frac{3}{8}'' \times 1\frac{1}{4}''$.

Ch. 00364. Two frs. of black silk (?) brocade, thin and harsh, woven in twill, rather open in texture, dull surface. On edge part of bird (?) spot pattern remains in silk of chrome yellow, the yellow threads only introduced to form spot and cut short behind. Complete design irrecoverable, perhaps like that of Ch. 00228. For other true brocades, see List under Ch. 0065. Length $5\frac{1}{4}''$.

Ch. 00365. Triangular head-piece of figured silk from banner, with border of fine fawn silk and suspension loop of purple silk damask as Ch. 00242. Remains also of side streamers and of purple damask patch at base of triangle. Figured silk of loose weave as Ch. 0076, with large pattern, in orange on an old-gold ground. Fr. remaining shows trilobed leaf, and edge of open flower in naturalistic style. Dirty and discoloured. $1' \times 6\frac{1}{2}''$.

Ch. 00366. a–b. Two valance streamers of figured silk, lined with plain fawn silk. Figured silk of same weave as Ch. 00295, and very like in colour and design. Ground dark green; pattern, alternating rows of circular rosettes formed of central star of three narrow leaves, from between which radiate on short stems three spreading bilobed petals. Colours in alternate rows apparently bright and pale pink, now faded; (*b*) worn through middle. $1'\ 5\frac{1}{2}'' \times 2\frac{3}{8}''$.

Ch. 00367. Fr. of figured silk, much worn. Loose satin weave as Ch. 0076. Pattern: a small repeating circular spot, composed of two reversed birds (?), hardly distinguishable; see Ch. 00179. Woven in pale yellow, blue, and green on scarlet ground. Gr. M. $5\frac{1}{4}''$.

Ch. 00368. Two frs. of figured silk. Woven in firm satin twill with slightly stiffened warp, broader untwisted weft. Design too fragmentary for reconstruction, in pale grey-blue on apricot ground. Both *c.* $3\frac{1}{2}'' \times 1\frac{3}{4}''$.

Ch. 00369. Strip of figured silk, like Ch. 00230 in weave, colouring, and (so far as can be seen) in character of design. Shred preserved shows section of large intricate repeating spot (?) geometrically treated, and woven in dark and lighter blue, bright yellow, white, and green, on bright red ground (?). Colours very fresh. $7\frac{1}{2}'' \times \frac{1}{4}''$.

Ch. 00370. a–b. Two frs. of twill silk fabric, of unusual weave. (*a*) is composed of warp of very fine pink silk yarn, stiffened, and weft of broad, flat, soft yarn,

untwisted, champagne colour. The weft is differently treated in alternate lines. In line A it passes over five threads of warp and under one; in line B it passes under three, over one, under one, and over one, the last corresponding to the warp thread passed under by weft A. The weft being close pressed, and the warp very fine, the thread which mainly forms the surface of the material is weft A. (*b*) is of same weave, with weft of Chinese blue. Gr. length $4\frac{1}{2}''$.

Ch. 00371. Remains of printed silk banner, with head-piece; identical with Ch. 00307 and 00358. Torn in three. Three Chin. chars. on border of head-piece. H. $8\frac{3}{4}''$; gr. length of printed silk $1' 5'' \times 6''$.

Ch. 00372. Remains of two banner streamers of printed silk, much discoloured. Pattern: repeating quatrefoil rosettes set diagonally on pink ground. Rosettes have sq. four-lobed centres in dark green and yellow, with pink lozenge outlined with blue in middle. Petals pink; outlines natural white of silk. $1' 10\frac{1}{4}''$ and $1' 6'' \times 2\frac{1}{8}''$.

Ch. 00373. a–b. Two frs. of large paper painting, fine work with delicate colouring fairly well preserved, showing part of *group accompanying a Buddha.* On R. of (*a*) is a many-tiered umbrella, hung with streamers and tasselled chains of the kind often found over one of chief Bodhisattvas in large Maṇḍalas (see *Ch. lii. 003). On L. against background of large-leaved flowering trees is a demon, with shock of red and green hair, reddish-pink face, dark blue body and limbs, holding up naked infant who leans towards him smiling and holding out his arms. Palms of demon's hands are also red. The infant's form and features very delicately drawn and shaded in pink and white. He has close-cut black hair, and red trefoil mark upon his forehead. Below appears upper part of halo, top-knot, and tiara of a Bodhisattva, and above central orn. of tiara (apparently part of it) the antlered head of a white stag. A Lokapāla's head with sword over his shoulder appears again below to L., and part of halo and top-knot of another Bodhisattva to R.

Hair of all figs. chocolate brown; fillets and streamers of their head-dresses in silver paint outlined with pink. The stag's antlers are also silver. Face only of Lokapāla preserved; it is pink, with clearly drawn red outlines, green irises to eyes (like demon's above), and black eyebrows drawn in a series of fine black wavy lines (like those of infant).

(*b*) shows the greater part of a standing Bodhisattva, $\frac{3}{4}$ to R., with black hair and silver flesh shaded with pink, wearing heavy necklet and chains, and dull purple stole lined with green. His legs are lost.

The picture has been drawn upon fine slip laid over smooth buff paper; this has mostly flaked off from (*b*) and edges of (*a*), leaving only blank paper beneath. Colouring bright but soft, comprising (besides colours above referred to) soft blue, pink, copper-green, maroon, and orange (two last on metal-work only). Execution more finished than that of any of other paper paintings, and in drawing and colour much resembles the large silk Paradise picture Ch. 00216 (q. v.). The identity of personages represented has not been determined; but the demon holding up a child is found in two other pictures—as one of the group of divinities attendant on Bhaiṣajya in the large Paradise *Ch. lii. 003, and as an attendant of Vaiśravaṇa in woodcut Ch. 00158. (*a*) $1' 6'' \times 1' 2''$; (*b*) $1' 2'' \times 6''$. *Thousand Buddhas*, Pl. XLVI.

Ch. 00374. Piece of silk damask, fine terra-cotta. Pattern: rows of elongated lozenge-shaped flowers, each composed of four lozenge-shaped petals with open centres. Flowers and spaces balance each other in alternate rows. Ground plain, pattern small twill; excellent weaving. Sand-encrusted. $1' 6'' \times 8\frac{1}{2}''$.

Ch. 00375. Fr. of figured silk, pasted on outside of Tib. MS. Ch. 0180, which is written across thick slip of paper afterwards folded in four. Silk, worn threadbare, of same weave as Ch. 009 and of a like 'Sassanian' design, containing pairs of birds within circular borders. Fr. preserved shows segment of circle, rose-pink, with conventional palmette base and legs of duck (?) in dark blue and white. Border of circle dark blue spotted with elliptical white discs. Traces of design in spaces between medallions unintelligible. $3\frac{1}{4}'' \times 3\frac{1}{2}''$.

Ch. 00376. Paper painting with Tib. inscr., complete and in good condition, representing *Kālika*, disciple of Śākyamuni and fourth of Great Apostles. See Dr. Barnett's note in Appendix *K*, and for other paintings of same series, Ch. 00377, 00401. K. seated on mat, $\frac{3}{4}$ to R., cross-legged, with feet hidden, wrapped in red and buff mantle lined with olive-green, which covers shoulders and arms. R. hand carries begging-bowl at breast; L. is raised and held out with thumb, first and second fingers extended. Head shaved, eyes large and black, features blunt and irregular, drawn with decision and full of character. Into ground on R. is stuck beggar's staff, with bracket below head from which hangs wallet; behind head oval pink halo edged with flame, and above simple canopy. Inscr. is written across bottom of picture; all round dark-brown painted border. $1' 5\frac{1}{4}'' \times 10\frac{1}{4}''$. *Thousand Buddhas*, Pl. XXXII.

Ch. 00376. a. Three frs. of printed silk. Main piece has dull brown ground with part of flower cluster in red, green, and yellow, sewn to fr. of apricot-coloured silk. Other two frs., very small, show part of floral design in same colours. Largest fr. $11\frac{1}{2}'' \times 2''$.

Ch. 00377. Paper painting showing *Bodhisattva* with Tib. inscr., of same series as preceding and Ch. 00401; complete and in good condition, though stained in places. For Tib. inscription giving name of Bodhisattva, see Dr. Barnett's note in App. *K*. Bodhisattva of 'Indian' type seated on yellow lotus with feet all but crossed; R. hand in *vitarka-mudrā* at breast; L. horizontal below it, as though supporting some object, but nothing is represented. Face of ferocious aspect with large black eyes, frowning eyebrows, wide thin mouth, and small moustache and beard. Hair black, in top-knot,

and in ringlets on shoulders; flesh faintly coloured with pink; garments touched with pink, crimson, and olive-green, jewellery uncoloured. Behind are oval halo and vesica; latter uncoloured, former deep yellow, and both edged with flame. Above a simple canopy, and on either side discs of Sun and Moon: Moon on Btva.'s R., all paint lost; Sun on his L., containing the bird. Latter has been touched up and in process has been given only two legs, but third visible below. Inscr. is written across bottom of painting; see below. 1′ 4¾″ × 1′ 0¼″. *Thousand Buddhas*, Pl. XXXII.

Ch. 00378. Paper painting showing two Buddhas (unidentified). Upper one stands ¾ to L. within elliptical vesica which surrounds whole fig.; lower is seated on mat. Standing Buddha wears under-robe covering feet and red mantle which leaves R. breast, shoulder, and arm bare; hands are joined at breast, R. hand clasping fingers of L. His vesica has outer border of flames, and inner border orn. with small scattered flames or clouds; the field is covered with crooked rays alternately red and black. His halo is circular with a border of straight rays, and its centre also orn. with scattered clouds or flames. The Padmāsanas of both are conventional single lotuses, whose centres are strewn with small rosettes.

The lower Buddha is seated in meditation, his mantle covering both shoulders and hands. He has no *uṣṇīṣa*; small triangular flames shoot upwards and sideways from his shoulders. His halo is of same character as that of Buddha above, but arch-shaped, ending off at shoulder level. His Padmāsana is placed on mat strewn with small rosettes, and divided by bands of black dots into three triangular sections. Before him stands a covered (altar?) vessel, and at one of the mat's corners is fixed upright a pole with cross-piece from which hang flask and fly-whisk (?). On either side of mat stands also in background a small black attendant, dressed in under-robe and red mantle like Buddha above; one with his hands clasped at breast, the other carrying a pole with flask and fly-whisk. Round edge are sketched clouds, flaming jewels, a censer, a flask, and other emblems.

Drawing exceedingly bad, the forms of the body where visible especially bad in proportion and grotesque in outline; colouring limited to black and light red as described above. Condition good. 1′ 5″ × 7⅝″.

Ch. 00379. Paper painting, apparently a *charm against sickness*, but uninscr. Above square, with T-shaped space in middle of each side (see *Ch. 00190) at which stands demon against background of flame. Demons are resp. dragon (?)-headed, ox-headed, horse-headed, and elephant-headed; three carry Vajra, noose, or flaming sword, while fourth clutches breast with both hands. Within square crossed Vajra, with circle at centre containing flask; within each of four arms is drawn resp. eight-pointed wheel, Vajra with triple-forked ends, Vajra with single-pointed ends, and flat dish with tripod foot containing objects indistinguishable. Corners of square filled in by four figs. in armour, placed diagonally; three holding resp. halberd, flaming torch, and noose, while fourth seems to tear apart his garments in front with his hands.

Immediately beneath square a monk sitting on mat; to L. another fig. clad only in red skirt lying on mat and holding his sides in pain.

In L. bottom corner again stands another fig. in white *dhōti*, arms uplifted in distress, and arms, legs, and body transfixed with knives. Beside him two globular objects with short tripod feet, latter part resembling tripod referred to above. Globular part bears marks perhaps intended for grotesque human features; figs. may possibly represent demons of disease. In same corner are represented a Vajra, censer, and Vajra-topped bell. R. bottom corner blank.

Drawing rough; colouring pale red, green, and yellow in places. 1′ 5″ × 1′.

Ch. 00380. Paper painting, bottom and R. side lost, showing pilgrim or hermit walking L. accompanied by tiger. Cf. same subject in Ch. 0037 (*a*). Hermit here represented as extremely wrinkled old man with shaggy eyebrows, deeply sunken eyes and cheeks. With R. hand he leans upon staff; in L. he carries stout fly-whisk. He wears sandals, long spotted trousers, tunic reaching to knees; over it shorter spotted tunic with long sleeves, tied by girdle round waist. On head mushroom hat over skull-cap, tied under chin by scarlet bands. On his back bundle of manuscript rolls tied in cover and slung by chain to thorny branch above. Attachment of branch to his person not clear, but it is evidently part of his equipment. On his further side stands tiger, with threatening expression and open jaws. Both figs. stand on cloud of dark red fire; on another in L. upper corner seated Buddha. Paint used for these cloud scrolls has destroyed paper, and this accounts for lost parts of picture. On L. edge two blank cartouches, for inscr.

Colouring only dark red, light red, and grey, distributed over clothing and equipment, while flesh is uncoloured. Masterly drawing, giving a vivid impression of weird inhuman character of subject.

May represent the Tib. lay-saint *Dharmatrātā*, author of Udānavarga (see Waddell, *Buddhism of Tibet*, p. 377); but his association with tiger unexplained.

Part preserved, in good condition. 1′ 4″ × 1′. *Thousand Buddhas*, Pl. XXXIII.

Ch. 00381. Linen canopy, coarse, made square with plain hanging border. Top roughly painted in red, orange, green, and black, with large circular lotus rosettes and cloud scrolls; border as a draped and jewelled valance. Suspension loops along edges on unpainted side. Fair condition. 3′ 1″ sq.

Ch. 00382. MS. roll-cover, made of oblong sheet of stout paper covered each side with silk and bound with silk round edges. Silk on outside, dull yellow, plain weave, very fine warp and broader weft giving slightly ribbed effect; binding on ends, strong leaf-green plain silk; binding on long sides, bright yellow plain silk, slightly glazed; lining, silk damask, warp dull chocolate, weft brownish yellow, woven in small twill and with tiny quatrefoil spot in darker

colour. To one end is sewn part of silk tie, doubtless like that of Ch. xlviii. 001 when complete; band remaining made of strips of crimson, bright yellow, and powder-blue silk, and forms sides of triangle. The three layers of silk and paper forming body of cover stitched together with fine running threads. Damask worn; otherwise well preserved. For other examples of roll covers, see under Ch. xlviii. 001. 1' 8½" × 11".

Ch. 00383. a–c. Three frs. of paper painting in Tibetan style: (*a*) and (*b*) belonging to same picture, prob. a *Maṇḍala*, (*c*) distinct, and showing *group of Bodhisattvas*. Condition good.

(*a*) and (*b*) formed R. and L. sides respectively of large picture, in centre of which was red disc apparently containing an eight-pointed (?) star for divinities, like centre of Ch. 00398, 00428. (*a*) shows part of this disc and three points of star, which was yellow with white flame-border, while disc has Vajra-orn. border. No divinities visible on small part of star preserved. Disc formed centre of oblong panel of brilliant green; outside it 5" border of slate-blue.

Immediately outside R. upper curve of disc small Buddha seated in meditation on lotus, and facing outer edge of painting. Whole of rest of panel and border are covered with figs. of Tantric divinities, ranged one above other or side by side, each against his background of forked orange and yellow flame. The series covering border all straddling in attitudes of violence; those within stand straight facing spectator. They wear short *dhōtīs*, or (in many cases) leopard-skin breeches, and red scarves; their heads and necklaces are decked with skulls, and serpents twine about their arms and legs. Many have animal heads, e.g. boar, hawk, lion, cock (?), elephant, and horse—last demon holding on L. hand conch-shell from which rises smaller horse-head; others have grotesque human heads. They carry usual Tantric symbols, *vajra*, *ghaṇṭā*, mace, axe, trident, noose, etc., and stand on lotuses or prostrate human figs. Some also tear human bodies with their hands.

Painting a good example of Tantric style, but without any special distinction in workmanship. Colours opaque, well preserved. (*a*) 3' × 1', (*b*) 2' 3" × 11½" (max.).

(*c*) Horizontal strip from large picture, incomplete above and below, showing series of small seated Bodhisattvas, against brilliant vermilion background. Bvas. may have been attendants on larger fig. not preserved, or may have been represented in more or less haphazard juxtaposition as in Ch. xxii. 0023, without any attempt at unity of composition. To R. end, beyond indigo border finishing either edge of the main strip, is pasted fr. showing smaller seated Bodhisattvas facing outwards and evidently belonging to another picture.

Bvas. on main piece are all seated on lotuses, one in attitude of 'royal ease', some with legs interlocked, others with one leg pendent. One holds Vajra, another a pink lotus bud, another a Vajra on long-stemmed pink lotus, another a long-stemmed pink lotus without Vajra, fifth holds Pōthī. The two in middle sit in arched niches behind crimson wooden railing; and had a third fig. also in niche between them (now lost). All are purely 'Indian' in physical type, dress, jewels, and accessories, resembling in all these essentials Bodhisattvas of Ch. lv. 007, etc., and lvi. 0027–0031. Hair of all black; flesh outlines red; flesh pink and white, light red, or pale grey. Colouring otherwise bright opaque red, yellow, slate-blue, green, pink, and white on strong red background; surface fairly preserved; work good of its kind. 1' × 2' 11".

Ch. 00384. Paper painting showing Bodhisattva, prob. *Avalokiteśvara*, seated on Padmāsana. Legs interlocked with soles up; hands in *vitarka-mudrā* on either side of breast; no extra heads, and no Dhyāni-buddha. Fig. and dress in style of *Ch. 00102; halo and vesica circular with flame border. A straight border is ruled off all round picture and painted grey. Colouring limited to dull red, green, grey, grey-blue, and yellow. Rude work and poor condition. 1' 4¼" × 11¾".

Ch. 00385. Paper painting showing the *Six-armed and Nine-headed Avalokiteśvara* (Kuan-yin) with two monkish attendants. Stands facing spectator on red-tipped lotus; upper hands holding up discs of Sun and Moon (Moon on L. hand, Sun on R.); second hands, in *vitarka-mudrā* on either side of breast, hold branches of willow; lower R. hand holds noose, lower L. flask. The Moon's disc contains only tree. Nine heads, two large, are arranged as follows: two large ones in profile on either side of principal head, a row of five small heads above, and Dhyāni-buddha head on top. Dress in 'Indian' style of Ch. 00125. Flesh roughly shaded with red; colouring otherwise dull red, blue, green, and pale yellow. Monks have close-shaved heads, and wear under-robes of black and yellow, mantles of red and blue, and pink shoes. One holds censer, other offers flowers on dish. Rough work, fairly preserved. Blank cartouche for inscr. in L. upper corner. 1' 7" × 1' 1⅛".

Ch. 00386. Paper painting, showing *Thousand-armed Avalokiteśvara* (Kuan-yin), standing; 'thousand' hands form halo which reaches almost to knees. Fig. larger and cruder edition of those in Ch. 00394. a–b; attitude, dress, and colouring practically same. Discs of Sun and Moon here contain no figs.; other emblems include skull-headed mace, Vajra-topped mace, noose (?). Bands of grey-blue again drawn across top and bottom of picture. 1' 7½" × 1'.

Ch. 00387. Paper painting showing *Avalokiteśvara* (Kuan-yin) standing facing spectator, on lotus rising from tank; R. hand holds willow branch, L. by side carries flask. Dhyāni-buddha in grey robe appears on front of tiara. Two yellow birds (ducks?) stand on either side of tank; background sprinkled with willow and lotus sprays and blossoms, flaming jewels, and clouds in Chinese style. On L. also blank cartouche for inscr., and child, in sleeveless shirt and long trousers, carrying flowering branch.

Drawing of a badness which reaches the grotesque, especially in treatment of fig. Flesh painted yellow, with red cheeks; features large and irregular, Svastikas on palms of hands. Dress of 'Indian' type of Bodhisattva dress with unusually large number of narrow scarves. All fabrics are

painted with repeated rosettes; draperies bunched up to give impression of gauzy material. Colouring only pale yellow, red, or pink, dull green, and greenish-brown. Torn round edges. 1′ 5¾″ × 11¾″.

Ch. 00388. Paper painting showing *procession of two-humped camels and horse* advancing to L. Five sheets pasted together end to end, showing resp. three camels, horse led by an attendant, and another horse (incomplete) pasted on upside down. Figs. on large scale and very roughly drawn as in Ch. 00207, of which this is perhaps a part. Animals have leading ropes through their noses. Only colouring again consists in dashes of coarse red and light green on saddle-cloths. On rev. at one end is pasted end of another sheet, covered with large Chin. writing executed with heavy brush and interspersed with finer chars. 5′ 4½″ × 11¾″.

Ch. 00389. Paper painting, almost obliterated, showing *Six-armed and Eleven-headed Avalokiteśvara* (Kuan-yin) seated on red Padmāsana, with monk-donor below. Upper hands held discs of Sun and Moon, Moon in R. showing tree, hare, and frog, Sun in L. showing bird; middle R. hand in *vitarka-mudrā*, L. obliterated; lower hands on knees, but exact position indistinguishable. Fig. and dress were in 'Indian' style, eyes long and straight. On R. edge two blank cartouches for inscr. In R. bottom corner stands monk-donor, holding censer. He has short black hair, and wears yellow under-robe and black mantle lined with red. Painting much broken. 1′ 2¾″ × 1′ 0½″.

Ch. 00390. Paper painting in two frs., showing *Six-armed and Eleven-headed Avalokiteśvara* (Kuan-yin) seated on scarlet lotus rising from tank. Tank filled with copper-green water from which rise crimson and purple half-open lotuses, and thick scrolled foliage of orange, purple, slate-blue, and green below Padmāsana. On upper fr., which all but joins lower, is Avalok. with circular halo and vesica, draped canopy, and blank cartouches for inscr., resp. green and yellow, on either side.

Fig., dress, jewellery, arrangement and colouring of heads, etc., as in *Ch. 00102; but emblems held and pose of hands somewhat different. The upper pair hold up, R. the Vajra-headed mace, L. beggar-staff; middle pair are placed facing each other before body, and pointing downwards, with thumb, first and second fingers hanging, third and fourth bent up. Lower hands lie on knees, R. holding willow spray, L. flask. Halo and vesica of concentric rings of variegated colours with flame border; lotuses in background. Colouring, Indian red, orange, copper-green, dull grey, and pale slate-colour in fresh condition. Painting mounted in Kakemono-fashion, with bamboo slip stiffening top, and wooden roller at unpainted lower end. *C.* 2′ 3″ × 11½″.

Ch. 00391. Fr. of painted silk banner mounted on paper; destroyed almost beyond intelligibility, but apparently a replica of the *Virūpākṣa* of *Ch. 0035, etc. Traces of his green eyes, red-brown beard, purple mantle, and of copper-green, soft blue, and crimson of armour and other draperies remain. In two pieces; together 1′ 2″, width 6½″.

Ch. 00392. Paper painting of Buddha, perhaps Amitābha, in same style, workmanship, and colouring, as series Ch. 00191–00202. Legs in adamantine pose, R. hand in *vitarka-mudrā*, L. holding stemless red lotus bud before body. Robe chocolate with turquoise lining, drawn partially over R. shoulder; under-robe bright red. Inscr. on R. much broken and worn; brown stain over upper part turning turquoise to dark green. 10″ × 7¾″.

Ch. 00393. Tattered remains of paper painting with Chin. inscr., showing *Avalokiteśvara* (Kuan-yin) seated on lotus behind altar and tank (mostly destroyed). No Dhyāni-buddha. Hands raised, each in *vitarka-mudrā*, on either side of breast; flesh yellow shaded with orange; background filled with flowers and flying birds. Workmanship of rudest kind and colouring limited to red, yellow, dingy green, and brown. Salutation to Kuan-yin on cartouche in L. top corner. *C.* 1′ 4″ × 11″.

Ch. 00394. a–b. Two paper paintings, each showing two standing figs. of *Thousand-armed Avalokiteśvara* (Kuan-yin); hands conventionally represented form halo round upper half of fig. as in Ch. 00386. Dress of 'Indian' Bodhisattva, as in Ch. 00125, with only draped scarf across upper half of body. Each holds up small discs of Sun and Moon, showing bird and tree; amongst other symbols represented are the willow, blue, pink, or white lotus, rosary, noose, conch-shell. Flask not shown.

Figs. single-headed with third eye upright in forehead; faces short and round; black hair done in low cone on top of head, and not showing below. On top also it is almost covered by head-dresses, which are made of clusters of round jewels in bead settings interspersed with flaming jewels, and set on red fillet which falls on either side of face in series of short red streamers. Avalok. on L. of (*a*) has also the Vajra set upright in front. Flesh brownish shaded with red; colouring otherwise a gay mixture of orange-red, deep blue, copper-green (on jewellery), true green, pale yellow, and pink, set off by broad band of grey-blue drawn across top and bottom of each picture. (*a*) 1′ 4¾″ × 1″; (*b*) 1′ 5″ × 1″.

Ch. 00395. Paper painting showing *Four-armed Avalokiteśvara* (Kuan-yin) seated on lotus. Broad style of work without detail. General type and attitude of fig. as in *Ch. 00102, etc.; Moon's disc on R. upper hand shows tree, hare, and frog (the two animals mere blots); Sun's disc on L. shows good example of crested phoenix. Lower hands in *vitarka-mudrā* on either side of breast. No Dhyāni-buddha. Circular halo and vesica of plain rings of contrasting colour. Colouring only dull red, blue, green, and yellow; flesh uncoloured. Good condition. Paper tabs projecting sideways at corners, with pin-holes. 1′ 7¾″ × 1′ 3″.

Ch. 00396. a–i. Nine paper paintings representing *Buddha* seated on Padmāsana; all on paper of peculiarly deep yellow, and identical in colouring, style of work, and pose of fig. except for *mudrā* of L. hand. Legs interlocked with soles of feet turned up; R. hand in *vitarka-mudrā* at breast; L. hand in lap or at breast holding red-tipped lotus bud, or

resting on knee (palm inwards), or (once) before body, palm downwards and fingers curled up, or (once) horizontal before body, with palm uppermost and fingers extended, empty. Mantle drawn partly over R. shoulder, and R. arm otherwise bare except in one instance, when it is covered by end of under-robe. Circular halo and vesica, and jewelled canopy overhead. Hair black with crimped edge, eyes straight, flesh shaded with pinkish purple. Colouring otherwise scarlet, true green, copper-green, and slate-grey, with black edge to under-robe. Rough workmanship.

Prob. pasted at beginning of manuscript rolls, as one end always shows signs of pasting, and the other is sometimes stiffened by gumming round a strip of bamboo. Paper same as used in Ch'ien-fo-tung MSS. of T'ang period. Average size $11\frac{1}{2}'' \times 15\frac{1}{2}''$ to $16\frac{1}{2}''$.

Ch. 00397. Paper painting, with border of dark green silk preserved along top and sides, and linen suspension loops. Shows *Four-armed Avalokiteśvara* (Kuan-yin) seated with donors; general style throughout as in *Ch. 00102, but coarse workmanship. Discs of Sun and Moon in upper hands contain resp. bird and tree with two lumps below representing hare and frog. Lower hands in *vitarka-mudrā* on either side of breast. Donors consist of woman on L. and monk and civilian on R., kneeling either side of tall green stalk from which Avalok.'s Padmāsana opens. This end of painting torn and incomplete. Colouring orange-red, slate-blue, crimson, and green, all now dull. With border $1' \, 8'' \times 1' \, 3''$.

Ch. 00398. Paper painting with Tib. inscr. forming *Buddhist magic diagram or charm*; has been folded in four, and one quarter lost. Plan same as in *Ch. 00190, etc., but in place of eight-petalled lotus at centre four crossed Vajras forming eight-pointed star, with circle in middle, contents of which are obliterated. No figs. of divinities appear, only lotus buds or Buddhist emblems resting on lotuses and orn. with flying streamers.

These comprise: (i) in three remaining spandrels of inner square (which has Vajra border), arrow-head (?), bow, and censer; (ii) in first of outer squares, rice-cake (?) symbolizing the Universe (see Waddell, *Buddhism of Tibet*, p. 296), trilobate jewel, lotus, vase, and willow, Vajra, three-armed symbol resembling the Manx emblem, crossed Vajra, conch-shell, trident, wheel, and one or two objects indistinguishable; (iii) in three extant corners of second outer square, sword, standard, and object indistinguishable; and (iv) in three extant corners of outermost square, heads of crossed Vajras. Remainder of outer square filled with alternate lotus buds in arched compartments and sections of lotus flowers appearing between arches. T-shaped figs. in middle of each side painted red criss-crossed with black, or uncoloured and criss-crossed with red. Tib. inscrs. appear on blades of Vajra at centre, and on T-shaped figs. of outer square.

Drawing rude; colouring only red and yellow in places; paper stout brown, two thicknesses pasted together. $1' \, 10\frac{3}{4}'' \times 1' \, 10''$ (where complete).

Ch. 00399. Illuminated Pōthī leaf, showing flaming jewel in centre. On either side Buddha seated on lotus, turning towards jewel, with R. hand raised in *vitarka-mudrā*, or with thumb and second finger joined. Behind each again is monk in parti-coloured mantle and yellow under-robe, also haloed, hands in adoration. Figs. separated by bamboos. Coarse work. On rev. one l. scattered Tib. words or chars. $1' 4'' \times 1\frac{3}{4}''$.

Ch. 00400. a–c. Three paper paintings representing (*a*) *Śākyamuni* with attendants, (*b*) and (*c*) *Avalokiteśvara*, seated behind altars. Ś. has black hair, small moustache and imperial, R. hand in *vitarka-mudrā* at breast, L. below it holding alms-bowl filled with rice. On either side stands Bodhisattva with hands in adoration; behind two monkish disciples, one of normal aspect, other with open mouth and distended eyes. On either side of Avalokiteśvaras are conventional willow trees. Workmanship of roughest, but following conventions of *Ch. 00102 type. Colouring dingy, limited to crimson, dirty greenish brown, yellow, and white much blackened. All three paintings have been gummed on to some rough flat surface, and torn by removal. $11'' \times 8\frac{3}{4}''$.

Ch. 00401. Fr. of paper painting from same series as Ch. 00376–7, and in same 'Indian' style, showing female divinity, prob. *Tārā*. Fig. seated on yellow lotus, with feet just crossed at ankles. R. hand over knee, holds long-stemmed white flower with back-turned pointed petals; L. hand behind thigh, holds tall pink lotus. Head bent over R. shoulder; eyes looking down. Dress and jewellery that of 'Indian' Bodhisattva, including anklets; black hair done in high cone and in straggling ringlets on shoulders. Skirt coloured pink, girdle faint green, stole grey, and scarf over breast yellowish brown; but flesh and jewellery are untouched and existing colours all faint. Halo oval, red in centre and yellow towards edge. Top and bottom of painting lost. Gr. length $11''$, width $10''$.

Ch. 00402. Paper painting showing *Buddha* seated on Padmāsana; legs in adamantine pose, R. hand in *vitarka-mudrā*, L. in lap. Flesh painted yellow, hair black, mantle (covering L. arm and corner of R. shoulder) red lined with grey and white. Plain circular vesica and halo of green and grey, and conventional flower spray above. Smudged remains of Tib. chars. upside-down at side, pin-holes in corners. Rough work. $11\frac{1}{2}'' \times 5\frac{3}{8}''$.

Ch. 00403. Fr. of paper painting showing upper half of standing *Avalokiteśvara*. He faces spectator, R. hand (raised) holding willow branch, L. (hanging by side) lost. Dhyāni-buddha on front of tiara. Rough example of 'Chinese Buddhist' style, outlines and colouring much destroyed. The latter apparently consisted only of light red (on flesh and inner robe) and grey. Two Tib. chars. on rev. $1' \, 2\frac{1}{2}''$ (incomplete) $\times 10''$.

Ch. 00404. Fr. of paper painted roll showing a series of Bodhisattvas. Of these two remain: *Kṣitigarbha* as Protector of Souls in Hell (complete), and *Six-armed Avalokiteśvara* (incomplete). K. is seated on lotus behind altar, begging-staff in R. hand, flaming jewel in L. He wears black-barred red and buff robe, and dark shawl over his

head as in *Ch. 0021, etc. Face old, and severe in expression. On either side of him are ranged, one above the other, five of the Infernal Judges, kneeling, with rolls of paper in their hands; but three of those on L. are lost.

Avalok. also seated cross-legged, on high Padmāsana. His middle pair of hands are in *vitarka-mudrā* at either side of breast, each holding long-stemmed pink and blue lotus between finger and thumb. His other L. hands and part of side are missing. R. upper hand holds up disc of Moon, containing tree, hare, and frog, and R. lower hand hangs over his knee in *vara-mudrā*. Dress and orns. as in *Ch. 00102, etc. To L. of him, but standing turned away, are two men in long coats, resp. red and green, and wide black hats like those of donors in same painting. They both have their hands at breasts, L. enclosing all but thumb of R.

Colouring throughout only dark red, green, grey, and pale yellow; drawing rough. Torn, but condition otherwise fair. 1′ 9″ × 11″.

Ch. 00405. L. edge of paper painting, with wide paper top and borders, evidently representing *Vaiśravaṇa*, though only L. hand and foot left. Former is held outwards, a striped guard covering forearm, and supports a Stūpa; L. foot, shod with black and gold shoe, rests on upturned hand of demon or more prob. nymph. Cf. Ch. 0087 and 00158. In R. bottom corner, on a group of small spotted hillocks, stands young woman in Chinese dress, with hands in adoration, corresponding to nymph who offers flowers in Ch. 0018, 00158, etc. On upper border of picture is shown small attendant Bodhisattva kneeling on cloud, and below run a series of buff medallions on red ground, the only one complete containing a dragon. Chinese angular wave pattern down side. Colour remaining chiefly dull red, olive-green, and slate colour; much obscured by dirt. 2′ 7½″ × (*c.* ⅓ of orig. width) 6½″.

Ch. 00406. Paper painting showing *Buddha* seated on Padmāsana, with circular halo and vesica, and canopy with knotted streamers above. R. hand at breast, thumb and first two fingers extended; L. horizontal below it, back uppermost and fingers outspread downwards; legs interlocked and one upturned sole exposed. General style as in Ch. 00191–00202, and painting like these prob. from end of manuscript roll. Colour limited to dingy crimson, orange, and greenish brown. 12¼″ × 9½″.

Ch. 00407. Paper painting showing *Buddha* seated in adamantine pose on Padmāsana, with circular halo and vesica behind, and conventional flower spray above. R. hand in *vitarka-mudrā* at breast, L. below it horizontal with fingers curved downwards. Rough work; colouring only dull red on mantle, flower petals, and rings of halo and vesica, and grey on mantle lining. Torn, and patched behind. Evidently from end of manuscript roll like Ch. 00191, etc., as L. edge has been pasted and R. is gummed round bamboo slip. 9¾″ × 8¾″.

Ch. 00408. Remains of paper painting showing *Buddha* seated in adamantine pose on lotus; R. hand in *vitarka-mudrā* at breast, L. below it hanging downwards, thumb and second finger joined, and third and fourth fingers bent up. Dress, accessories, and colouring as in Buddhas of silk paintings, but work of roughest description. From flower floating in air on R. rises head and shoulders of man or child with hands in adoration. Head is shaven, but has two-eared bow of child's head-dress (see Ch. lvii. 004) drawn in outline on forehead. Details throughout hardly recognizable owing to dirt. 1′ 8″ × 1′ 3″.

Ch. 00409. Fr. of paper painting in roughest style and almost obliterated by dirt, showing upper part of *Dharmapāla Vajrapāṇi* in attitude of anger, L. hand uplifted brandishing Vajra (?). He has demon head with large mouth and staring eyes, and wears nondescript robe of black. Only other colour red, used for shading of flesh. 1′ 8½″ × 1′ 3½″.

Ch. 00410. Fr. of silk painting, showing a bullock-cart supporting a scarlet-draped platform on which sit a group of musicians in Chinese dress. Three play energetically on narrow-waisted drums, one on a flute, and another on what seems to be a ring or a disc which he strikes with a stick. The instrument of the sixth is invisible. The driver is twisting the tail of the bullock to guide him, but most of himself and the animal is lost. Drawing spirited, but rough. Gr. M. 8¾″ × 6¼″.

Ch. 00411. Tattered remains of paper painting, showing *Avalokiteśvara* seated with legs interlocked, each hand holding willow spray over shoulder. Partial colouring only of maroon, light red, and grey. Poor work. 1′ 1″ (incomplete) × 11″.

Ch. 00412. Fr. of paper painting, showing black-capped demon with club, riding on back of dragon (?); both figs. incomplete. Only colour, touches of red. Remains of 3 ll. Chin. below. 5″ × 3″.

Ch. 00413. Paper painting from series similar to Ch. 00191–00202; shows *Buddha* seated on lotus with crossed legs (feet invisible), and hands in lap supporting alms-bowl. Robe, red lined with pinkish buff, is wrapped closely round body, covering both shoulders, breast, and arms almost to wrist in manner of sleeves. Halo and cartouche also red, and centre of lotus greenish blue. Uninscribed. 8⅜″ × 5⅞″.

Ch. 00414. Sheet of woodcuts. Number of small squares of flimsy paper pasted together to make large sheet, and covered with rows of small *Buddhas* in oblong panels. B. seated European fashion on throne, with feet resting on lotus; R. hand in *vitarka-mudrā*, L. held out palm uppermost. Poor printing. 4′ 3″ × 4′ 10″.

Ch. 00415. a–b. Roll of woodcuts (in two pieces). Flimsy paper covered with prints from small square block, showing *Buddha* seated between two standing Bodhisattvas. B. cross-legged on lotus, with hands in *dharmacakra-mudrā*. Circular halo and vesica, and flower canopy. Bodhisattvas have pointed haloes. Impressions placed in irregular rows; printing very bad. On rev. of (*a*) is one l. Chin. chars. in black and red. 4′ × 11″.

Ch. 00416. a–b. Two frs. from sheet of wood-cuts. Flimsy paper, with rows of prints from small oblong block showing *Bodhisattva*, seated on lotus ¾ to R. R. leg bent up, L. leg pendent; R. hand on Padmāsana holding long-stemmed lotus, L. raised as if in *abhaya-mudrā*. Poor block, badly printed. Gr. M. 1′ 3″ × 8″.

Ch. 00417. Roll of woodcuts. Roll of thin paper, covered with impressions of small *Buddha* seated on lotus, holding alms-bowl in lap. No halo or vesica; no detail in fig. Roll torn in several pieces, and in bad condition. Main piece 11′ 4″ × 11″.

Ch. 00418. Fragmentary sheet of woodcuts. Flimsy paper covered with prints of small oblong block showing *Bodhisattva*, seated on lotus throne. R. leg pendent, L. bent across; R. hand on knee, L. raised from elbow and hand held out open sideways. Circular vesica and oval halo. Flowers in air. Much torn. Gr. M. 1′ 10″.

Ch. 00419. Fragmentary roll of woodcuts. Thin paper covered with impressions from small oblong block, showing *Buddha* seated cross-legged on lotus. Both hands open at breast, slightly apart. Circular halo and vesica; no detail. Badly torn. Gr. M. 1′ 10″ × 10¾″.

Ch. 00420. Woodcut on paper showing *Buddhist charm* with Chin. and Tib. text. Charm circular in form, with eight-petalled lotus at centre (as in *Ch. 00190, etc.), Vajra head appearing in middle of each petal; 10 concentric rings of Tib. chars. round lotus; border of Vajras and flame. All this in red. In heart of lotus 3 ll. Chin., written, in black. Paper flimsy, yellowish, glazed, or oiled, two pieces joined; printing on large scale and fairly clear. *C.* 2′ × 2′ 1″.

Ch. 00421. Roll of woodcuts. Thin paper, with double row of impressions from square block, showing *Buddha* seated cross-legged on lotus, R. hand in *vitarka-mudrā* at breast, L. in lap. Circular halo and vesica; flowers in top corners. Blocks roughly cut and printed, and impressions coarsely painted in light red and grey. *C.* 10′ × 10¾″.

Ch. 00422. Misc. frs. of woodcuts on paper, similar to Nos. 00414–19, etc., and comprising frs. of sheets with impressions of: (i) small oblong block showing *Bodhisattva* seated on lotus with R. leg pendent, L. bent across; R. hand on knee in *vara-mudrā* and L. on thigh; no halo or vesica, but cloud rising on either side; printed in red; (ii) small figs. of Bodhisattva, cross-legged on lotus, hands in adoration; (iii) border of cloud designs (?) with fr. of Chin. printed text below; (iv) small oblong blocks showing Buddha cross-legged on lotus, under canopy and flowering trees, hands in *dharmacakra-mudrā*. Gr. fr. 1′ 5″ × 10¾″.

Ch. 00423. Paper picture representing shrine, in natural buff of paper on blackened background. Method and effect same as in Ch. 00148; but the pasted-on design has here mostly been torn off, leaving unblackened space where it lay. Shrine of same type as in Ch. 00148, but standing on high base of conventional scroll-work. On tips of eaves on each side stands a phoenix. String for suspension at top. Well preserved. 1′ 8″ × 11½″.

Ch. 00424. Drawings on paper; rough sketches only, on obv., of two demonic divinities; on rev., of hands in various *mudrās*. Demons on lines of demonic Vajrapāṇis of silk banners (see Ch. xxiv. 001, etc.), holding up resp. Vajra and bell. Hands include two holding writing-brush. 8″ × 3″.

Ch. 00425. Paper stencil for Bodhisattva; prob. standing, but lower half destroyed. Picture drawn in all details, leaving border at edge, and main parts then cut out. 1′ 7½″ × 11½″.

Ch. 00426. Fr. of oiled (?) paper for tracing (?), showing part of standing Lokapāla. 6½″ × 5⅜″.

Ch. 00427. Drawing on paper, showing assemblage of *Bodhisattvas* seated in tiers on lotus flowers. Lotuses rise on straight stems from hexagonal architectural base; whole group cone-shaped, culminating in single Bodhisattva on lotus at top. Bodhisattvas sit with legs crossed, or in 'enchanter's' pose, or attitude of 'royal ease', and hands in mystic poses; some of figs. very 'Indian' in style. Smaller figs. in upper tiers only sketched; drawing of lotus stems, etc., on L. side unfinished. 1′ 4⅜″ × 11″.

Ch. 00428. Drawing on paper showing *Buddhist magic diagram or Maṇḍala.* General plan as in *Ch. 00190, etc., but with two outer squares only and uninscr.; deities and emblems shown throughout by drawn figs.

In middle, circle which contains four crossed Vajras forming eight-pointed star. In centre of star a smaller circle, containing seated Buddha; its four cardinal points covered with other seated Buddhas, five representing Five Buddhas of Meditation. Buddha in middle, with hands in *mudrā* of Six Elements, represents Vairocana; four others distributed as follows: above, Amitābha, Buddha of West, holding lotus; below, Akṣobhya, Buddha of East. R. hand in *bhūmi-sparśa-mudrā*, L. holding Vajra.

On R. Amoghasiddhi, Buddha of North, R. hand in *abhaya-mudrā*, L. holding crossed Vajra.

On L., Ratnasambhava, Buddha of South, R. hand in *vara-mudrā*, L. holding flaming jewel. Last Buddha has been drawn first, by mistake, on point of star between S. and E.; but mistake has been corrected by pasting over it piece of paper with drawing of right fig.

All Buddhas sit on lotuses with legs interlocked, and wear Bodhisattva dress of skirts, stoles, jewellery, and six-leaved crowns. Intermediate points of star contain four kneeling Bodhisattvas, presenting offerings to Buddhas and perhaps representing four of Celestial Boddhisattvas. They are as follows:

Between W. and N., Bva. turned towards Buddha of W. and holding lamp on long holder.

Between N. and E., Bva. turned towards Buddha of E. and holding censer.

Between E. and S., Bva. turned towards Buddha of E. and holding dish of flowers.

Between S. and W., Bva. turned towards Buddha of S. and holding conch-shell.

In three spandrels formed between circle and first square,

kneeling divinities, two of whom hold resp. clappers and wreath. Fourth spandrel blank.

Of two outer squares, inner blank. Outer shows in corners Four Kings with triple-pointed Vajra-head in extreme corner above each; in T-shaped spaces in middle of each side (*Ch. 00190), demonic deity in contorted pose against background of flame, and accompanied by symbolic animal.

The Kings are placed as follows: In L. top corner, Virūpākṣa of West, with flaming sword; in R. top corner, Vaiśravaṇa (?) of North, with bow (?); in R. bottom corner, Virūḍhaka of South, with club; in L. bottom corner, Dhṛtarāṣṭra of East, with guitar. All are in armour, seated on flat-topped thrones, with one leg pendent, one half-bent.

Animals accompanying demons are resp.: above, tiger (rampant), on R. lion; below, elephant, on L. dragon.

Between demons and Kings are represented on each side two of Eight Glorious Emblems, each on lotus-standard orn. with streamers, and arranged as follows: above, fish and conch-shell; on R., eight-pointed wheel and trident-head; below, canopy (single and three-tiered); on L., flask and flaming jewel.

Good condition. 1′ 5″ × 1′ 4⅝″.

Ch. 00429. Four frs. of silk damask, brilliant red, highly glazed. Ground plain; pattern of leaves and stems, in twill. Gr. M. 5″.

Ch. 00430. a–b. Two frs. of silk damask, indigo, woven in two varieties of concentric lozenge diaper. Ground plain, pattern twill; fine close weaving. Cf. Ch. 00333, 00499–00502. Gr. M. 4″.

Ch. 00431. Two strips of silk (?) fabric, black, in twill; fine twisted warp, stiffened; flat soft weft. Gr. length 10″.

Ch. 00432. Border of figured silk from head-piece of banner, torn, but with suspension loop of coarse red cotton twill attached. Woven with warp of fine stiffened red yarn, and flat untwisted weft as Ch. 0076. Weft double, indigo forming face of material, and light blue forming back. Pattern: a series of small circular spots arranged in rows and worked in yellow and red, second weft in these stripes being indigo. Much faded. Length of sides *c.* 11″, width of band 2½″.

Ch. 00433. Two strips of plain silk, thick, and soft; rather loose weave; natural-coloured. Gr. length 1′ 2″.

Ch. 00434. Four frs. of plain silk, pale greenish blue, thin, faded. Gr. M. 1′ 3″.

Ch. 00435. Fr. of plain silk, pale green, thin. 1′ 5″ × 11″.

Ch. 00436. Four frs. of plain silk, blue, but of various textures and shades. One gathered on to bamboo strainer wound with silk yarn, and apparently part of banner. Gr. M. 10″.

Ch. 00437. Tab of silk gauze from valance streamer, thick, dark red, in twined weaving like that of Ch. 00332. See also Ch. 00444. Length 3½″.

Ch. 00438. Star-shaped flower of silk gauze, made of bands of the gauze, red, green, and white, with printed pattern, ingeniously looped and knotted. Points finished with silk tassels. Diam. *c.* 5″.

Ch. 00439. Corner of silk square, double, possibly from votive patchwork as Ch. lv. 0028. Corner piece of deep yellow plain silk, with fragmentary design of long-tailed birds (?) and clusters of leaves and blossoms, outlined (stencilled ?) in black and with centres of red, black, or green. Rapid drawing. Below is fr. of printed silk, same as Ch. 00305. Both sewn on foundation of plain deep yellow silk. Much discoloured and torn. 1′ 5″ × 1′ 6″.

Ch. 00440. Square of silk damask, pale yellow, thin, loose weave; pattern a small lozenge lattice-work. Well preserved. 1′ 9″ × 2′ 5½″.

Ch. 00441. Strip of plain silk, indigo, from streamer of valance; fine regular weave. 2′ 6½″ × 6″.

Ch. 00442. Seventeen miniature canopies in form of silk or linen squares, with silk tassels at corners and suspension loop in middle. When complete they were strained over a framework of two bent twigs, crossed diagonally, which gave the umbrella shape required, but one only retains this. The materials are—linen: terra-cotta (2), brown (1), yellow (1), natural buff (3); silk: yellow (2), one glazed, white or buff (2), green (2), grey (1), red (1) incomplete; patchwork of buff and indigo silk with tag streamers, incomplete (1). The last, with twig framework, is made half of plain yellow silk, half of two frs. of sage-green silk damask with patterns on different scales of chevron lines connected at angles by elliptical spots. Ground plain, pattern twill. 9½″ sq. to 4½″ sq.

Ch. 00443. a–c. Misc. silk frs. (*a*) Square, from patchwork, of thick purple gauze backed with light blue silk and yellow silk. Flying bird, apparently design for embroidery, outlined on it with running thread and gauze cut away within outline. 6″ × 4½″. (*b*) Tie for manuscript-roll cover made of two strips of fine silk gauze, green and gamboge, joined sideways, with tag of similar red gauze at end. Woven in open lozenge lattice-work. 1′ 7″. (*c*) Tassel of three strips of material, black damask and green silk resp., and fr. of figured silk of same weave and prob. like pattern to Ch. 009. Gr. length 2½″.

Ch. 00444. Fr. of silk gauze, dark plum-coloured, resembling Ch. 00332 in weave, but lighter. Gr. M. 6″.

Ch. 00445. Frs. of silk gauze like preceding, but of lighter and more open texture. From banner streamers stamped with leaf designs. Some frs. show remains of stalks embroidered in green. Gr. length 3′ 7½″.

Ch. 00446. Misc. frs. of silk embroidery, bird and flower design like Ch. 00281, of which it may be a part. Worked on dark green or indigo gauze backed with plain silk of same colours; chief colours in embroidery pinkish buff, green, yellow, tomato-red, Chinese and pale blue. Gr. length 9″.

Ch. 00447. a–b. Two silk streamers of complete type, prob. from valance Ch. 00279; materials same. (*a*) in fair condition, (*b*) torn away from lining and faded. Length 1′ 5″ and 1′ 2″.

Ch. 00448. Fr. of silk embroidery, on strong gauze of dull purplish black; twined weave like that of Ch. 00332, etc. No backing. Embroidery remaining shows parts of two leaves worked in satin-stitch; one in dark brown, red, and lemon-yellow; other in Chinese blue, dark brown, and scarlet. Colours fresh. $7\frac{1}{4}'' \times 1\frac{3}{4}''$.

Ch. 00449. Three frs. of silk embroidery, on black silk damask joined to plain black silk, and backed with brown. Shows traced running band of leaves, part of which only is worked; stems light yellow and blue in satin-stitch. On smaller fr. one leaf tip in crimson and yellow spiral. Damask woven in small twill with floral (?) pattern in larger twill running in same direction. Larger fr. $3\frac{1}{4}'' \times 2\frac{3}{8}''$.

Ch. 00450. a–c. Three frs. of silk embroidery. (*a*) and (*b*) strips of solid floral embroidery in satin-stitch, worked in white, scarlet, purplish black, green, and light blue on same gauze as Ch. 00444. Gr. length $7\frac{3}{4}''$. (*c*) Buddha head and halo, complete, prob. from large embroidery Ch. 00100. Worked in chain-stitch on buff silk; halo and flesh buff; *uṣṇīṣa*, eyes, and eyebrows indigo; nose and outlines red. H. $1\frac{1}{4}''$.

Ch. 00451. Large silk painting, with Chin. inscr., showing upper part of *Avalokiteśvara* (Kuan-yin), evidently standing, without attendants. Painting considerably broken and surface damaged, but fine example of 'Indo-Chinese' style of Bodhisattva, much like Ch. liii. 005. Workmanship of same graceful and refined quality; features and physical type of fig. same; and pose also, with its gentle inclination of body to L. shoulder. But latter line here counterbalanced by pose of head, which is leant over R. shoulder, the eyes looking down and backwards, to L. p. Of willow spray in R. hand only few hardly intelligible lines remain.

Dress, jewellery, and colouring (of Indian red, red-brown, dark olive, and black) are same, almost in detail, as in Ch. liii. 005; but paint upon body (white shaded with pink) has been much more thickly laid on, and more of it remains. Halo of plain circular rings of dark olive, red, and white; remains of canopy visible above. Inscr. in 5 ll. on large cartouche on R. $2' \; 5\frac{1}{2}'' \times 1' \; 11\frac{1}{2}''$. *Thousand Buddhas*, Pl. XLIV.

Ch. 00452. Large silk painting representing *Thousand-armed Avalokiteśvara* with attendants. Somewhat broken about top and bottom but otherwise complete, with border of faded red silk; surface considerably worn.

For general arrangement, and treatment of central fig. see *Ch. 00223. Attendants here number only six: in top corner garlanded and flower-bearing nymph flying down on either side of Avalok.'s canopy; fire-headed Vajrapāṇi in each of bottom corners; and in tank from which Avalok.'s lotus rises, Nymph personifying Virtue, and Sage. Nāgas are absent, and lower part of Nymph and Sage and whole front half of tank lost. The background is divided into upper and lower halves, respectively dull green and brown; the upper diversified by floating flowers, purple, orange, or pale blue.

In details figs. show no diversity from usual. Avalok. is single-headed with third eye in centre of forehead; tiara solid cone of chased metal-work with large Dhyāni-buddha in front; orange of flesh and black of hair entirely lost; jewellery painted red picked out with white. Among emblems appears quiver. Nymph wears Bodhisattva dress (so far as preserved), and amongst flames surrounding the Vajrapāṇi in R. corner appears crested yellow head of Fire-bird (?) as in Ch. 00105.

Workmanship generally not of the first rank, and colour lost to considerable extent; but painting in original condition must have been good average example of its class. General effect of background is greenish brown, pink and sky-blue being largely used on figs. and haloes. $5' \; 2'' \times 3' \; 2\frac{1}{2}''$.

Ch. 00453. Two frs. of silk damask, deep golden yellow, soft and well woven; ground plain, pattern twill. Design: chevron lines alternating with rows of elliptical rosettes as in Ch. 00294 (q. v.), but simpler and on small scale. Chevron line formed in same way of leaf-like forms set at right angles to each other; from its outer angles grow pairs of small leaves. Inner angles filled with single small leaves. Rosettes solid and four-petalled, the petals distinguished from each other only by difference in direction of the twill. Good condition. $6\frac{1}{2}''$ sq. and $6'' \times 2\frac{3}{4}''$.

Ch. 00454. Two frs. of banner streamers of silk damask, white or natural, now discoloured; regular weave; ground plain, pattern twill. Design: a repeating quatrefoil rosette, lozenge-shaped, *c.* $\frac{1}{2}''$ across. Material soft and torn. $2' \; 7\frac{1}{2}''$ and $1' \; 8'' \times 3''$.

Ch. 00455. Fr. of silk banner: head-piece and fr. of body of printed silk only preserved. Printed silk, much perished, shows lozenge-shaped floral groups or rosettes, like Ch. 00309, etc., in dark blue and pink. Head-piece of plain cream-coloured silk, discoloured, with border of dark greenish indigo silk damask. The latter shows repeating lozenge-shaped rosettes, eight-petalled, with circular centre, diam. *c.* 3″, woven in coarse twill on fine plain ground. Much torn. Remains of suspension loop made of green silk and strip of floral embroidery. Length of whole $1' \; 6\frac{1}{2}''$, base of head-piece 1′ 4″.

Ch. 00457. Remains of large silk painting representing *Paradise prob. of Amitābha or Śākyamuni*, with side-scenes showing legend of Ajātaśatru and meditation of Queen Vaidehī as in *Ch. lii. 003. Five-inch border of faded brown silk preserved for top and sides, showing size when complete. About half (longitudinally) of Vaidehī scenes preserved; Ajātaśatru scenes cut down through middle, and considerable part of each lost; interior of painting preserved only in a number of large fragments, chiefly from the sides; whole of lower end and centre, including central Buddha, lost.

Remainder similar to *Ch. lii. 003 in general treatment and arrangement; the drawing of considerable refinement and particularly recalling the above named in faces and poses of

attendant Bodhisattvas, though in worse condition. One fr. shows a corner of the Lake with an infant soul rising in a lotus-bud. Colouring quiet, consisting chiefly of putty-grey, light green, and orange, with smaller amount of crimson, and red-brown on jewellery. Flesh of Bodhisattvas white, shaded with pink.

The *side-scenes*, divided from the main picture by bands of repeating rosettes, white, orange, light green, and pink on a light grey ground, show the Ajātaśatru legend on R., Vaidehī's meditation on L. So far as they can be identified they run as follows:

On R. (*i*) Former incarnation of Ajātaśatru as a hermit. The mountains and his hut only remain, and a man with sword who was doubtless assaulting A. as in Ch. lv. 0047. *i*, and lvi. 0018. *i*.

(*ii*) Former incarnation of Śākyamuni, as white rabbit; see same references. Rabbit only remains, and stream below.

(*iii*) The infant Buddha (?), unhaloed, appearing on a cloud to V., who lies sleeping on couch inside pavilion. Two men in foreground.

(*iv*) A man in coat, tailed cap, and long boots, entering the heavily nailed door of a pavilion. Bimbisāra entering prison (?).

(*v*) A. seated on verandah of pavilion, while a man in yellow coat prostrates himself before him. Two men with axes, a minister or official, and other men (mostly destroyed) stand round.

(*vi*) A man as in (*iv*), looking out of half-open door of pavilion.

(*vii*) On L. a man in yellow coat seated within pavilion, and in middle top of a woman's coiffure—two high loops of hair as in Ch. 0051, etc.; head turned towards L. Evidently V. visiting B. in prison. On R., A. on horseback, accompanied by man with axe, advancing L.

In foreground, L., upper half of two men in profile to R. In foreground, R., man in brown coat bowing to man in yellow.

Prob. combination of several scenes. Cf. Ch. 0051. *iv–v*; lv. 0033. *v*; lv. 0047. *vi–vii*; etc.

(*viii*) Ajātaśatru pursuing V. with sword.

Scenes below lost.

On L., V. meditating on Sukhāvatī; objects of meditation, so far as preserved, are: the sun, amongst mountains, a Buddha appearing in the sky above it; water—a stream; the moon—a white disc encircled with red, placed within an enclosure like the coping of a tank, upon the ground; water—as ice (?), cf. Ch. 0051. *viii*; lvi. 0018. *xii*—a white square with black crossmarks, within a coping; the mansions of Sukhāvatī—a two-storied pavilion. V. wears white skirt, and orange or grey jacket; her hair done in drooping top-knot at corner, with gold flower orn. on top, of head.

C. 6′ 8″ × 6′ 6″.

Ch. 00458. Remains of large silk painting, representing the *Thousand-armed Avalokiteśvara*, seated, with attendants. Fragments only; paint almost entirely gone from central pieces, lower obscured by dark discoloration.

In composition and general treatment evidently similar to *Ch. 00223, etc., attendants consisting chiefly of seated Bodhisattvas and Lokapālas, on small scale, and exceptionally numerous. One fr. shows R. (spectator's) half of A.'s fig. and halo, with chin of principal face, but rest of face and all other heads lost. Another shows corresponding portion of A.'s Padmāsana and corner of tank with group of Bodhisattvas and Lokapālas from R. lower side, and head of Vajrapāṇi in R. bottom corner. Above the tank rises the head of a Nāga, upholding A.'s Padmāsana, but too much effaced to show details of head-dress.

A third shows part of four tiers of seated Bodhisattvas and Lokapālas from other side of picture, and part of Vajrapāṇi from L. bottom corner. Smaller frs., in cleaner condition and apparently from upper half of picture, show additional seated Bodhisattvas and Lokapālas, and a roughly drawn fig. of the Sage, here four-armed, with upper hands raised, and lower at breast or on thigh. No trace remains of Nymph of Virtue, or Bodhisattvas of Sun and Moon.

Colouring chiefly crimson, blue, green, orange, and 'bronze' colour on greenish-brown background; workmanship of middle class.

H. (incomplete) *c.* 4′ 10″, width (incomplete) *c.* 3′ 9″.

Ch. 00459. Remains of large silk painting; prob. *Thousand-armed Avalokiteśvara* with attendants, from presence on one fr. of small Bodhisattva seated within orange disc, prob. representing Bodhisattva of Sun; cf. *Ch. 00223, etc. Central fig., however, completely lost.

The attendants comprise numerous Bodhisattvas, seated or standing, their flesh coloured yellow, light green, light blue, or pink, and their hair black, brown, or light blue. Many have three heads, and four or six arms with which they hold up sacred emblems such as flask, shell, wheel, and jewel. Among them also is single-headed thousand-armed Avalokiteśvara; and an eleven-headed Avalok. (rest of fig. lost) with the Dhyāni-buddha over each of three principal heads. Dhyāni-buddha is also found on heads of a large number of other Bodhisattvas, whether single or triple headed.

Traces remain of two seated Lokapālas, one adjoining Bodhisattva of Sun. Large fr. from R. centre shows decorated canopy hanging on red-flowering trees. There are no traces of architectural background, or lake; hence it is the more likely that painting was not a Paradise.

There is comparatively little detail in decoration, etc. Figs. drawn in clean thin lines of black; faces not grotesque. Features are of 'Chinese Buddhist' type. Dress either of the same (see *Ch. 002) or, in case of green and yellow divinities, of more 'Indian' type with narrow stoles. Colouring fairly preserved, bright and light in tone, consisting chiefly of blue, green, crimson, white, orange, and flesh-colour on light greenish background, with black or brown only on hair.

Evidently very large when complete. Gr. M. (four frs. which join) 3′ 10″ (apparently from nearly top to about middle of picture) × 2′ 1″.

Ch. 00460. Silk painting representing *Six-armed Avalokiteśvara*, seated, with attendants. General type of

A's fig., dress, and accessories as in *Ch. 00102, etc. Upper hands hold up (R.) disc of Moon containing tree, and (L.) disc of Sun containing phoenix (legs obliterated); middle hands in *vitarka-mudrā* at breast with lotus spray in each; lower on knees, R. with thumb and first finger joined, L. in *bhūmisparśa-mudrā*. Eight small heads including Dhyāni-buddha's are piled on top of normal head; two in profile on either side of latter, which usually complete eleven, have prob. been omitted through carelessness. On either side stands Bodhisattva of type *Ch. 002 with hands in adoration.

Poor drawing; colouring chiefly slate, green, yellow, crimson, and orange; surface much worn and silk frayed into tatters. R. bottom corner has been cut away and replaced by piece of thin brown silk, of which also only frayed remnant remains. 1′ 3″ (incomplete) × 1′ 6″.

Ch. 00461. Fr. of silk painting showing *Avalokiteśvara* of Indian type, with small attendant Bodhisattva kneeling in sky above. L. side only of A. preserved, with L. leg bent across and lying flat along Padmāsana, L. hand resting behind thigh, and part of head inclined slightly over R. shoulder with fr. of Dhyāni-buddha preserved over forehead. No clue to position of R. arm and leg, but prob. same as in Ch. 00121, as pose on L. side (so far as preserved) is same.

Dress, orns., and type of fig. also as in above; ringlets of blue hair on shoulders; long oval halo and large circular vesica; canopy above, and traces of conventional lotus growing up R. side. Good drawing; colour practically gone except for dull crimson on scarf and halo.

Whole painting has been done over part of larger subject for which the silk seems to have been originally used. Disappearance of paint from later subject has revealed in places the drawing, and remains of colour, of earlier fig. This appears to have been a seated *Bodhisattva*, more than life-size, whose bent knee, covered with rosette-sprinkled drapery and ornamental knee-cap (as in *Ch. 00102, *00223, etc.), is seen to R. of A.'s fig. against background of vesica. It extends from about A.'s eye level to hand, and appears between body and arm as well as outside arm. Behind it again appears sq. corner of some architectural object, with a small Gandharvī with hands in adoration looking over it from behind. Downward edge of this architectural object is continued beneath lower edge of knee, and disappears behind A.'s hand. It is unfamiliar, and its exact significance not quite clear. The arc of A.'s vesica passes outside both this and knee.

It is curious that no trace of larger fig., in drawing or colour, should appear on A.'s fig. where the paint has disappeared; not even within the outlines of arm, on either side of which its greenish ground and dark pink rosettes are quite clear. This points to possibility of Avalok. having formed part of orig. picture—prob. a life-size fig. with smaller deity seated at each knee, and other attendants—though no such composition has been found among rest of paintings.

In any case picture has been cut down from its orig. size and Avalok. used as an independent painting. This is shown by remains of narrow silk binding, on upper edge of fr. just above level of A.'s canopy, at a height which would not allow enough room for completion of larger fig. A few Tib. chars. are scrawled below this binding.

3′ × 10¾″ (gr. width).

Ch. 00462. Remains of painted silk banner, all accessories lost. Fair condition, but colours dim.

Subject: *Bodhisattva*. Fig. preserved complete up to tassels of canopy, but background to R. and L. of head lost. Walks from spectator, presenting ¾ R. back view; L. hand swinging somewhat behind back, and fingers gathering up skirt; R. raised, carrying at shoulder-level object now lost, prob. bowl. Back hollowed, and shoulders thrown back in vigorous pose, well drawn. Dress and head-dress as in Ch. i. 002; but scarves less ample, revealing lines of body and arms, and skirt ankle-length only, showing feet walking. Head in profile to R.; red jewel on front of head-dress, and blue hair below, curling behind shoulders. Soles of feet and inner side of hands drawn in red; remains of colour on dress light blue, vivid red, chocolate brown, and white. 1′ 3½″ × 6⅞″.

Ch. 00463. Remains of painted silk banner, all accessories lost; showing lower draperies, etc., of *Bodhisattva* of *Ch. 002 type, standing or walking ¾ to L. Remains of colour white, dark pink, orange-red, light blue, greenish brown. (Gr. length) 1′ 2⅜″ × 7⅛″.

Ch. 00464. a, b. Two frs. of painted silk banners; all accessories lost.

(*a*) shows body from shoulders to hips of *Bodhisattva* standing facing spectator. Body slim-waisted, leaning outwards to R. hip; scarves and orns. in 'Indian' style; R. hand raised holding rosary; L. arm by side. 4″ × 7⅝″.

(*b*) from another banner, shows feet of *Bodhisattva* standing facing spectator, and lower end of draperies in *Ch. 002 style. 4½″ × 7″.

Ch. 00465. Remains of painted silk banner; all accessories lost; showing *Mañjuśrī* on lion. Greater part of lion, advancing to R., and lower end of painting, preserved; also upper part of M., seated facing spectator with R. hand in *vitarka-mudrā* at breast. Head and all above lost. General type as in Ch. xxii. 001; poor condition, paint almost gone. 1′ 2″ × 5½″.

Ch. 00466. Remains of painted silk banner representing a *Buddha*. Fig. complete up to shoulders; head and all above lost, and all accessories. B. stands facing spectator on bright blue lotus, hands in adoration at breast; end of crimson mantle drapes L. arm, end of light green under-robe, R.; white under sleeves to wrists. Bright light colouring, clean workmanship. 1′ 5″ × 7″.

Ch. 00467. Fr. of painted silk banner with Chin. inscr., showing head and part of body of *Dharmapāla Vajrapāṇi*. Remainder of painting, and all accessories, lost. V. of demonic type, as in *Ch. 004, etc. (q. v. for descr.). Stands ¾ R. with head turned back to L., and carries long Vajra. *C.* 7″ × 7″.

Ch. 00468. Remains of painted silk banner; fair condition, but stained; all accessories lost.

Subject: *Dhṛtarāṣṭra, Guardian of the East.* Stands ¾ L. on back of crouching demon; R. hand at breast with arrow; L. hand and arm lost, but half of bow below. A replica of Ch. xxvi. a. 002; but with different colouring and different treatment of scale-armour. Scales on helmet and shoulder-flaps, round-edged, overlapping downwards; on skirts, oblong, overlapping upwards; on lower part of body, represented by hexagonal diaper in white, black, and green—the hexagons again subdivided by a longitudinal line down centre which forks at each end to form a small lozenge at top and bottom, and an elongated hexagon at each side. Barbed end of arrow partially preserved.

Colouring chiefly chocolate and dark red (on stole); crimson and orange-red (on upper girdle, skirt, and borders of coat of mail), green (on halo and border of skirt), and white and green on scale-armour. 1′ 11″ × 7″.

Ch. 00469. Fr. of painted silk banner, showing upper half of *Virūpākṣa, Guardian of the West.* Stands facing spectator; R. hand in *vitarka-mudrā* at breast; L. below it, fingers clasping jewelled top of sword (?); head turned towards R. shoulder. Remainder of painting, and all accessories, lost.

Dress evidently of the more 'Indian' type; see Ch. xxvi. a. 006, and *General Note,* *Ch. 0010. Helmet incomplete, but apparently resembling that of Ch. xxvi. a. 006; coat of mail with round-edged scales on body (overlapping downwards) and tight-fitting elbow-sleeves of oblong scales (overlapping upwards); straight cuirass passing under arms, no straps shown; dark maroon mantle fastened under chin and passing back over shoulders. Knots of red drapery behind shoulders. Face human, with enlarged eyes. Remains of colour only maroon, crimson, and white; much worn. Blank cartouche for inscr. to L. 8″ × 7½″.

Ch. 00470. Fr. of painted silk banner, showing back of helmeted head and halo, and R. shoulder, of *Lokapāla* looking ¾ to R. Remainder of painting, and all accessories, lost. Helmet of same type as in Ch. 0040, with plume and out-curling protective rim but no gorget; both head-piece and rim of round-edged scales, red and yellow, overlapping downwards. Sausage-shaped collar of vivid red with scroll orn. in copper-green and long tasselled tie of dark pink; on fr. of shoulder oblong scale-armour also in red and yellow, scales overlapping upwards. Halo of pea-green with flame-border of bright red, and remains of cloud scroll in same colours. Gr. M. 7¾″.

Ch. 00471. Fr. of painted silk banner; colour and drawing much worn; all accessories lost.

Subject: *The Seven Jewels.* For other representations see Ch. 00114, and xxvi. a. 004. Incomplete both top and bottom. Wheel lost at top. Immediately under the edge appear, on L. the strong-box representing the Minister; on R., the Jewel, of trefoil shape, with pyramid of flame rising from it. Strong-box in form of hexagonal casket of chased metal-work, with conical overhanging lid, and projecting base. Below come, on L. the Wife, on R. the General; dress of both as in Ch. xxvi. a. 004, except that the scales of the General's armour are not represented, and the lady's hair is not done in loops, but in a roll round neck with large gold orn. on top as in series Ch. 0039, etc., to which banner perhaps belongs from similarity of workmanship and colour. Below again, the elephant, in profile to R.; and at bottom the horse, in profile to L.; harness as in Ch. xxvi. a. 004. Remains of colour only, crimson, blue, white, and brown, and green on grass. 1′ 7½″ × 7¾″.

Ch. 00472. Four frs. of silk painting, evidently representing *Avalokiteśvara.* Largest fr. shows A.'s face, well drawn, with remains of tiara and Dhyāni-buddha outlines in dark red; flesh orig. white and hair blue, but colour almost gone. Another fr. shows hand against white vesica, holding upright mace (?) with pennon. Other two show frs. of crimson cloud, and scroll. Gr. fr. 5½″ × 4″.

Ch. 00473. a–e. Misc. frs. from different silk paintings, including (*a*) remains of a Paradise painting, hardly coloured, showing frs. of Vaidehī scenes; cf. *Ch. 0051, etc.; (*b*) fr. of Paradise painting showing lower part of subsidiary seated Buddha with altar, and heads of attendant Bodhisattvas; colouring dark red, green, and black; (*c*) remains of donors from large painting—three men kneeling, in brown belted coats and black tailed caps. Rather coarse silk, and strong colouring of orange, red, dark brown. Frs. also of Bodhisattvas from the same; (*d*) fr. from upper corner (?) of large painting showing a pavilion under overhanging mountains; (*e*) small frs. of drapery, etc., prob. from banners. Gr. fr. (*b*) 8″ × 1′ 9″.

Ch. 00474. Roll of silk covered with traced figs. of Bodhisattvas, and Chin. inscr. by each.

Similar to Ch. xxiv. 008 (q.v.). Thin light buff silk, unevenly dyed yellow, with remains of red silk head-piece (seam only) showing no inscr. L. top corner knotted with buff silk streamer and red cord. Torn at upper end, but generally in good condition. Tracing on one side only.

At top of roll is drawing of flask on lotus (L. side), and remains of same (R. side); but below this the whole of R. strip is lost. L. shows series of nine standing Bodhisattvas, one below the other, traced in black but not coloured; each fig. occupying length of 3′ to 3′ 6″. All stand straight, the majority facing spectator and with dress and coiffure in semi-'Indian' style of *Ch. 0088, etc. First four have R. hand in *vitarka-mudrā*, L. hand horizontal below it, with or without lotus bud on palm; fifth holds lotus spray in R. hand and has L. by side; sixth and seventh (¾ to R.) have hands in adoration; eighth again resembles first four, but his dress is in style *Ch. 002; ninth resembles the fifth, but carries flask in L. hand. Inscriptions, on cartouches by each, contain epithets of Bodhisattvas and the names of Avalokiteśvara, Sarasvatī (and Vajrasattva ?).

Length 30′ 8″, width (at top) 1′ 10¾″, (of L. strip) 11¼″.

Ch. 00475. Several lengths of silk roll covered with traced Bodhisattvas; like preceding and Ch. xxiv. 008, but uninscr. Silk dark blue, tracing in yellow on each side.

At top is width of red silk (selvedge to selvedge 1′ 11½″, length 4′), on which are traced flower-sprays, etc., almost effaced. Below are two strips of dark blue silk, made here of separate pieces with selvedges on inside and seam on outside, and broken into several lengths. Bodhisattvas on a large scale, each fig. occupying over 4′ in length. They stand straight, facing spectator or ¾ to R. and L.; majority have their hands in adoration, and dress and coiffure of semi-Indian type of *Ch. 0088, etc. One carries a pennon on long pole.

Length (of double fr. with head-piece) 16 ft.; (of single strips) 32 ft., 11 ft., 6 ft., 5 ft. Width of strips 11⅜″ and 11¾″.

Ch. 00476. Roll of silk covered with traced figs. of seated Buddhas; like preceding and Ch. xxiv. 008, but one strip only, without trace of head-piece and uninscr. Ten Buddhas preserved, seated with legs interlocked on successive flowers of ascending lotus plant; hands generally one in *vitarka-mudrā*, one below it holding lotus bud, or in adoration. Yellow silk, slightly glazed, unevenly dyed, traced on one side only. Good condition. Length *c.* 18′, width 7¼″.

Ch. 00477. Fr. of silk roll traced with seated Buddhas; like preceding and Ch. xxiv. 008; but one strip only, on small scale, uninscr., and without trace of head-piece. Upper end blank; R. edge selvedge, L. torn. Thin yellow silk, unevenly dyed, and traced in black on one side only. Five Buddhas preserved, seated in meditation on Padmāsanas, occupying *c.* 7½″ each of length. Fair condition. Length 5′, width 7½″.

Ch. 00478. a–b. Two frs. of silk showing part of traced Bodhisattva. Upper half only of coiffure preserved, with segment of halo, cartouche for inscr., and draped valance of canopy above. Smaller fr. has continuation of canopy. Fig. evidently was about life-size. Silk bright yellow; tracing in thick black lines on both sides. Gr. fr. (*a*) 1′ 10½″ × 11″.

Ch. 00479. Four lengths of silk, thin buff, traced with large scroll pattern in black. Tracing one side only. Gr. fr. 5′ 6″ × 7½″.

Ch. 00480. Two lengths of silk, dark and light blue, joined, traced each side with large scroll pattern in yellow, and (at end of light blue piece) standing *Bodhisattva* with hands in adoration. Tracing much gone, and silk broken, especially the light blue. 13 ft. × 1 ft.

Ch. 00481. Two frs. of silk brocade, woven with single warp and double weft; cf. Ch. 00170, etc. Warp: a fine light green twisted yarn, forming surface of ground, which is woven in small twill. Weft: a broader untwisted yarn, cream and brown, cream and orange (faded), or cream and dark blue, according to line of pattern. This consists of six or twelve-petalled rosettes, 2″ × 2½″ in diam., and 1¼″ apart horizontally, set out in close rows, diagonally, with a ring of small starlike eight-petalled flowers surrounding each. These rings touch adjacent rings at their angles, and thus formed a light hexagonal network between the large rosettes. The latter were blue, brown, and orange in successive rows; their outlines and veining, and petals of small flowers, being woven always in cream, while centres of small flowers are of same colour as large rosettes adjoining. The shape of the latter varied in alternate rows. The largest fr. of rosette preserved has an inner series of trumpet-shaped trefoil petals, and an outer series of wide trilobate petals with smaller rounded petal-tip appearing between each pair. The edge of rosettes in adjoining rows show, however, only plain pointed petal-tips, prob. twelve to the rosette.

Weft forming petals passes loosely across surface of fabric, being interwoven with strand of warp only at intervals of ¼″ or so. Behind, however, the other weft is firmly interwoven with warp, and not left loose as in Ch. 00170. Same principle followed in weaving outlines and the small flowers. Good condition. 3″ × 2⅝″ and ¾″ × 7½″.

Ch. 00482. Fr. of silk damask, soft blue, firm and closely woven, with broad flat warp and very fine weft. On obv. latter predominates in ground, giving smooth silky surface, and warp in pattern forming a fine grain. On rev. the effect is naturally reversed. Design consists of lattice-work of bands *c.* ⅜″ wide, formed of small hooked tendrils, and enclosing elliptical or lozenge-shaped spaces in which are flower-sprays, alternately trumpet-shaped and elliptical five-petalled, with leaves. Good condition. 4″ × 1½″.

Ch. 00483. Two frs. of printed silk damask, soft, loose-woven; damask design a small lozenge spot on plain ground. Printed design, large, incomplete, consists of repeating medallions, with border formed of double intertwining bands, enclosing a flying bird or birds. Diam. of medallion uncertain; frs. preserved show arc of 1′ 3″. Bird appears to be of phoenix-type, with upcurled wings, crested head, curved beak, and short broad tail (?), but the pink in which much of it was printed has faded, leaving details obscure. Between medallions were spotted lozenge-shaped figs., incompletely preserved. Colour: damask ground, deep yellow; intertwining border of circle, dark greenish indigo, also central lines of bird's head, neck, and body, and quills of wings; remainder of bird, pink (faded); outlines and spots on bird's breast and tail, natural colour of silk. Fair condition. For design of similar type on small scale, see printed damask of Ch. i. 0022 (Pl. CXIII). 1′ 4″ × 4¾″ and 10½″ × 4¾″.

Ch. 00484. Two frs. of cream silk damask, orig. one and forming suspension loop of banner. Firm and closely woven. Ground, fine twill; pattern, large twill running in reverse direction. Frs. preserved show only rounded feathers of peacock tail (cf. Ch. 00293. a, b) from large design. 4½″ × 2½″ and 3¾″ × 1¾″.

Ch. 00485. Fr. of silk damask, light brown; yarn slightly stiffened. Ground and pattern both woven in twill, running in opposite directions. Design: a naturalistic spray of lotus (?) bud between two leaves, repeated in close rows and forming an all-over pattern. Good condition. 10½″ × 5″.

Ch. 00486. Eight frs. of silk damask from head-piece border of Ch. 00512. Old-gold, much dirtied and

discoloured. Thick soft yarn. Ground plain, pattern in large twill. Large design containing curved masses of foliage or feathers (?), unintelligible from these frs. (*a*) suggests necks and breasts of two confronting birds; cf. Ch. 00293. b. Gr. fr. $9\frac{1}{2}'' \times 2\frac{1}{2}''$.

Ch. 00487. a–b. Two frs. of figured silk (broken suspension loop) with damask lining. Frayed and rotten. Weave, a fine satin twill. Pattern of small floral type woven in stripes of different colours; central one only preserving design and showing small four-leaved plant (light green) repeating lengthways on dark brown ground. Side-stripes have cream ground, and pattern resp. in bright blue and orange, and orange and yellow; but edges of pattern preserved. Damask of brownish grey shows part of floral pattern. Each fr. *c.* $3\frac{1}{2}'' \times 1''$.

Ch. 00488. Fr. of silk damask, brilliant reddish-pink, glazed. Ground woven in small, pattern in larger twill, running in opposite directions. Design: circular four-petalled rosettes and lozenges (formed of four small lozenges), repeating in alternate rows. $4'' \times \frac{1}{2}''$.

Ch. 00489. Fr. of silk damask (forming suspension loop). Light pink, faded; fine soft weave. Ground plain, pattern twill. Design: two lines of chevron intersecting so as to form series of lozenges, and bearing at angles on either side elliptical four-petalled rosettes. Beyond these again were other chevron lines. Round intersections of chevron lines are woven also four small lozenges, forming another type of elongated rosettes, in rows between the elliptical. $7\frac{3}{4}'' \times 1\frac{3}{4}''$.

Ch. 00490. Strip of silk damask, grass green, fine weave. Ground plain, pattern twill. Design: elliptical rosettes with spot centre ($1\frac{3}{8}'' \times \frac{7}{8}''$), repeating in alternate rows with smaller four-armed crosses. Design widely spaced. Fair condition. $10'' \times 1\frac{1}{8}''$.

Ch. 00491. Fr. of silk damask, dull purple, very fine weave. Ground plain, pattern twill. Design: small motifs repeating in widely scattered rows set out diagonally. There remain (i) row of pointed leaves incomplete, perhaps in pairs; (ii) row of elliptical four-petalled rosettes; (iii) row of small flying birds (?) with spray in beak; (iv) rosettes again. $1'\ 5'' \times 2''$–$3''$.

Ch. 00492. Three frs. of silk damask, bright light red. Fair condition; soft fine weave. Plain ground; pattern, a very occasional, small flower motif, spray, rosette, or leaf with tendril in twill, set out in rows. Gr. length $1'\ 7\frac{1}{2}''$.

Ch. 00493. Misc. frs. of silk damask (remains of banner streamers); light terra-cotta, fine soft texture. Ground plain, pattern twill. Design: lozenge-shaped rosettes formed of four trilobate petals, repeating in rows. Least ragged fr. $1'\ 3'' \times 1\frac{1}{2}''$.

Ch. 00494. Fr. of silk damask, light red, surface glazed. Ground plain, pattern twill. Design: small repeating lozenge-shaped rosette, four-petalled. $6'' \times 1\frac{1}{2}''$.

Ch. 00495. a–b. Two frs. of silk damask, dark blue, soft rather loose weave. Ground and pattern woven in twills running in opposite directions. Design: a small repeating circular rosette, five-petalled, somewhat irregularly executed in parts. (*a*) $1'\ 2'' \times 5''$, (*b*) $2'\ 9'' \times 2\frac{3}{4}''$.

Ch. 00496. Strip of silk damask (banner streamer); indigo, fine close weave. Ground plain; pattern, small repeating lozenge, woven in broken twill. $2'\ 11\frac{1}{2}'' \times 1\frac{3}{4}''$.

Ch. 00497. Four banner streamers of silk damask with weighting-board attached. Damask bright blue, fine weave; ground plain, pattern twill. Design: a rather large semi-conventional floral pattern, somewhat on lines of Ch. 00351. Groundwork lattice of branches diversified by buds, bracts, and pairs of volute leaves, and forming at intervals rows of elongated hexagonal spaces in which are rosettes. Considerably torn. Weighting-board covered with salmon-red silk damask, of similar weave, pattern indistinguishable, stencilled on top with lotus and leaf design. Length of streamers $4'\ 1''$, weighting-board $1'\ 0\frac{1}{4}'' \times 2\frac{3}{8}''$.

Ch. 00498. a–b. Two ragged strips of silk damask, (*a*) light red, (*b*) wine-colour, tacked together and orig. forming part of picture; stencilled in heavy greyish-black paste with canopy, etc. Silk too broken to show designs complete. Both woven with plain ground and pattern in large twill: (*a*) glazed on surface. (*a*) shows part of circular 'spot', with scrolled border and rosette in centre; (*b*) a smaller all-over floral design, complete arrangement of which cannot be made out. Length (mostly completely frayed) $2'\ 4''$, width *c.* $7''$.

Ch. 00499. Three banner streamers of silk damask, bluish green, faded; fine close weave. Pattern: an all-over concentric lozenge diaper, passing at times into form of key-pattern as in Ch. 00333, 00430. Length $2'\ 6''$, width of streamers $2''$.

Ch. 00500. Three banner streamers of silk damask, blue, dirt-stained; fine weave. Pattern: concentric lozenge diaper turning into key-pattern rather more complicated than above. Length of streamer $3'\ 3''$, width $2\frac{3}{8}''$.

Ch. 00501. a–b. Two frs. of silk damask (one double), faded purple, very fine close weave. Pattern: diaper of concentric lozenges turning into form of key-pattern like Ch. 00333, etc. (*a*) $1'\ 0\frac{1}{2}'' \times 3\frac{1}{4}''$, (*b*) $1'\ 5'' \times$ (gr. width) $3\frac{1}{4}''$.

Ch. 00502. Fr. of printed silk damask; very soft rather loose weave. Printed design too fragmentary to be intelligible; but apparently had bluish-green ground leaving large circles or lozenges in light buff. Damask design, an all-over series of chevron lines, readjusted occasionally so as to form series of lozenge spaces filled with concentric lozenges. *C.* $1' \times 4''$ to $5''$.

Ch. 00503. Fr. of silk damask, golden yellow, very soft, rather loose weave. Ground plain; pattern, small lozenge lattice-work in twill. $5\frac{1}{4}'' \times 3\frac{1}{4}''$.

Ch. 00504. Ragged fr. of silk damask, dark brown, sand-encrusted. Ground plain; pattern, a small lozenge lattice-work in twill. 8" × 2¾".

Ch. 00505. Fr. of silk damask, light brown, fine close weave, dirt-stained. Ground plain; pattern, in twill, small lozenge lattice-work. Spaces filled with lozenge-shaped spots. 6" × 2".

Ch. 00506. Fr. of silk damask, bluish green, soft even weave. Ground and pattern woven in reversed twills; pattern, small repeating 'spot' of concentric lozenges. Gr. M. 3½".

Ch. 00507. Ragged frs. of silk damask, pasted on paper; light brown, very loose weave. Pattern apparently repeating lozenge-shaped or elliptical rosette, 1" in length. Ground and pattern woven in large reversed twills. Gr. fr. 2¼" × 1½".

Ch. 00508. Fr. of silk damask, wine-colour (two pieces joined). Ground plain; pattern in twill of large occasional floral 'spot', *c.* 4" across, prob. circular. *C.* 8½" sq.

Ch. 00509. Strip of plain silk, natural colour, even weave. One edge frayed to fringe; selvedge at each end. Across whole width are woven three narrow lines in light blue. Width (selvedge to selvedge) 2′ 9½", length 1¼".

Ch. 00510. a–b. Two frs. of printed silk (from suspension loop). Fine plain weave. Printed with blue ground leaving crescent, lentoid, or circular 'spots' in natural colour of silk, grouped in circles, etc., and prob. forming rosette shapes in complete design. Green and yellow discoloration. Each fr. 6" × 2".

Ch. 00511. Remains of silk banner. Head-piece of light brown silk damask, woven with plain ground and scattered four-petalled rosettes of flattened elliptical shape in twill. Border of plain brown silk. Fr. of body of printed silk, much faded, showing rosettes and leaves in greenish indigo. Length of whole 1′ 2½", width of banner 4".

Ch. 00512. a–e. Decayed remains of five silk banners. Head-piece and body of each made of figured silk like Ch. 00295, but having indigo ground and palmettes in buff. Head-piece border of yellow damask Ch. 00486. Streamers of plain blue silk; all very ragged. (Best preserved) length of whole *c.* 6", body 2′ 6" × 10".

Ch. 00513. Silk banner; weighting-board and most of streamers lost; poor condition. Head-piece of plain cream silk, with border of faded brown silk damask, and suspension loop of red ribbed silk. Damask woven with plain ground and pattern in twill; design, hexagonal lattice-work formed by elongated leaf-shapes touching at their extremities. Within hexagons are, in alternate rows, four-petalled (square) and twelve-petalled (elliptical) rosettes. Body of one piece of printed silk, much faded, but showing hexagonal lattice-work formed of trefoil-shapes alternately green and blue, with circular seven-petalled rosettes in the hexagons. Rosettes pink or buff, with blue centres and outlines left in natural colour of silk; ground buff (?); outlines of trefoils, natural colour. Remains of bottom streamers of cream silk. Tib. (?) chars. scrawled on head-piece. Length (without streamers) 2′ 9", width 7½".

Ch. 00514. Remains of silk banner; the painted silk has been mounted on paper and has finally disappeared except for fr. at bottom, and been replaced by length of plain buff silk. Banner otherwise complete, but in poor condition. Head-piece of brown silk damask, decayed; showing ground in small twill, pattern of large repeating flower (?) in large twill. Head-piece border of indigo silk; side streamers of light green silk; bottom streamers of light blue silk; weighting-board painted with three open yellow flowers on red ground. Length of whole 2′ 9", width 8½".

Ch. 00515. Silk banner; head-piece and side streamers lost. Body made of four sections of plain silk: puce, yellow, and two of light terra-cotta. Clean and fresh, but torn from stiffeners. Remains of bottom streamers of light brown. Length (without streamers) 3′ 6", width 10¾".

Ch. 00516. a–d. Decayed remains of four silk banners; very dirty. Made entirely of plain silk (green, white, fawn, brown, or puce), and one silk damask (red), woven in small lozenge lattice-work like Ch. 00503. Bodies made of four (?) sections, majority preserving only two. Streamers ragged. Gr. length (without streamers) 2′ 1", width 7⅜".

Ch. 00517. Silk streamer from valance; made of tabs of puce, lemon, pink, and rose plain silks; of printed silk with lemon ground and flower spot in blue and pink, and of blue-grey silk damask with plain ground and large naturalistic floral pattern (incomplete in fr.), in twill. Lined with light terra-cotta silk. Good condition. 1′ 6½" × 4½".

Ch. 00518. Fr. of silk painting (from banner). Delicately drawn and coloured; fair condition; shows *Escape of Prince Gautama* from Kapilavastu. Above on L. on cloud, Prince escaping on Kaṇthaka, small divinities in armour holding up horse's feet. In foreground, two or three women in red and blue robes lying asleep on Palace floor. On R. a seated woman, also asleep, specially finely drawn. Gr. M. *c.* 3" × 4".

Ch. 00519. Fr. of silk painting (banner), mounted on paper. Fair condition; good execution. Shows above, feet and lower end of robes, crimson, white, and blue, of standing personages; and below, a long cylindrical (?) object, grey-blue covered with rosette pattern in white, burning in mass of flames. 3¼" × 6".

Ch. 00520. Fr. of silk painting (banner), showing face of *Bodhisattva*. Skilled workmanship of *Ch. 002 type; face straight-eyed, with white fillet on head set with red lotuses and hair apparently in 'Indian' style (see *Ch. lv. 0014); but long drooping narrow beard and moustaches of Chinese mandarin. *C.* 4" × 6½".

Ch. 00521. Fr. of silk painting (banner?), showing purple lotus spray and butterfly (orange with yellow antennae) floating in air. Traces of other flowers at edges. $3\frac{1}{2}'' \times 4''$.

Ch. 00522. Rough sketch on paper, showing *Four-armed Avalokiteśvara*, standing, with ten smaller attendant divinities ranged down either side. Figs. Indian in style. Avalok. stands facing spectator, with high crown on head; upper hands at breast, L. hanging, R. holding long-stemmed lotus; lower hands by sides, R. in *vara-mudrā*, L. holding flask. Long horseshoe-shaped halo behind.

Smaller divinities all sit on lotuses, facing spectator, with feet crossed, or one knee drawn up in attitude of 'royal ease', or one leg pendent in 'enchanter's' pose. Long horseshoe haloes behind heads and circular vesicas. Dress and jewels hardly indicated; but central Avalok. has girdle and long skirt in style of *Ch. lv. 0014.

Small divinities in corners are four-armed and seated on animals; details as follows: (*i*) in L. top corner, deity on buffalo, holding axe, coral branch, skull-headed mace, and trident; (*ii*) in R. top corner, deity on goose (?), holding lotus, flask, flaming jewel, and death's-head club; (*iii*) on L. bottom corner, deity on peacock, holding halberd, club, bell, and object indistinguishable; (*iv*) in R. bottom corner, deity on phoenix, holding flaming trident (?), Vajra, and objects indistinguishable. Down each side are three Bodhisattvas, with hands in mystic poses or holding lotuses, or jar of lotuses on long stem. Drawing very uneven, and without detail.

$1' 4\frac{3}{8}'' \times 11\frac{1}{2}''$.

Ch. i. 001. Painted silk banner, with bottom streamers of plain indigo silk and weighting-board orn. with enclosed palmette pattern in black on partly red ground. Upper end of painting and all other accessories lost. Remainder in excellent condition; painted on both sides, but outlines (except of head and hands) on one only.

Subject: *Śākyamuni Buddha* with begging bowl. Stands facing spectator on two lotuses, scarlet and slate-blue; R. hand at breast holding black bowl filled with rice, L. in *vitarka-mudrā*. Great toe, especially of R. foot, very short. Dress as in Ch. xxiv. 005, but reversed, the mantle thrown over R. shoulder and under-robe draping L. From this and reversed position of hands, it is prob. that banner has been painted on wrong side. Colouring the same, but dingy and put on solid. Face of conventional Buddha type, with pearl at base of *uṣṇīṣa*, and outlines of face and hands drawn in broad lines of Indian red over the black. Careful execution. Dark yellow cartouche, for inscr., to R. of head, blank.

Painting $1' 11\frac{1}{4}'' \times 8''$, length with streamers $5' 2\frac{1}{4}''$.

Ch. i. 002. Painted silk banner; all accessories lost, but painting in excellent condition.

Subject: *Bodhisattva*. One of the most striking figs. amongst banners, and unique as regards pose and physical type, except for an inferior replica, Ch. xlvi. 001, and the fr. Ch. 00462. Walks from spectator to L., presenting $\frac{3}{4}$ back view, with head in profile over L. shoulder; L. arm by side, gathering up fold of stole; R. hand at shoulder level, bent back, and carrying pink lotus bud on palm. Fig. very erect with back hollowed; weight just thrown forward on R. foot, L. foot still on ground. Two lotuses, scarlet and grey, underneath; canopy overhead with swinging tassels and bells; halo an elliptical black ring, in outline only, allowing back of head and coiffure to be seen through it.

Dress evidently same as in *Ch. 002, etc., back hidden by falling loops of stole and knot of drapery tied at neck as in Ch. 0025. On head close-fitting cap of red, set with gold orns. at ear, forehead, and crown, but without lotuses or jewels. From gold ring at back of it projects an elliptical gold ring orn. almost as large as the cap, and apparently containing the hair, as the inside is painted black. Cf. similar head-dresses on Bodhisattvas in Paradise painting *Ch. 0051, 00116.

Features of a pronounced character, entirely non-Chinese, and suggesting rather a West-Asiatic origin. Forehead low and sloping with marked incurve to bridge of nose; nose long and prominent without curve; mouth large and pouting with finely cut lip. Eye, long and straight, half-closed, is given scornful expression by line of eyelid, which is drawn absolutely straight across it. Eyebrow long, only slightly arched.

Whole fig. expressive of dignity, scorn, and rapid movement, drapery following sweeping lines of the limbs. Workmanship highly finished, of *Ch. 002 type; colouring chiefly glowing scarlet, with olive-green and dark red on minor parts of dress. $1' 11'' \times 7\frac{1}{4}''$. Pl. LXXVIII.

***Ch. i. 003. Painted silk banner** with Chin. inscr. on painting and Chin. char. also on suspension loop and back of head-piece. Weighting-board and bottom streamers lost; frs. of side streamers of dark blue silk preserved. Painting in good condition, except at upper end.

Head-piece of printed silk, much faded, of same pattern as Ch. lxi. 005 and backed with sage-green silk; edges bound with red silk much decayed; suspension loop of fine gamboge and dark green silk.

Subject: *Kṣitigarbha* as monk. Stands $\frac{3}{4}$ to L. on pink lotus, feet somewhat apart as though walking; hands held before body; R. open, with first and fourth fingers outstretched, thumb, second and third bent up; L. horizontal above it, with palm downwards and fingers straight. Fig. has shaven head and wears monk's under-robe and mantle, but retains also some of Bodhisattva's jewels—bracelets, armlets, necklet, and ear-rings. Under-robe (green with a red border) appears only below knees. Rest of fig. is covered by mantle, which is brought from L. shoulder across back under R. arm and thrown again over L. arm, leaving R. arm, shoulder, and breast bare. It is of mottled green, orange, and white, divided into squares by heavy cross-bars of black, and lined with light red.

Shaven head painted white; eyebrows in green over black. Face finely drawn, with oblique down-gazing eyes, drooping aquiline nose, elongated ears, and *ūrṇā*; expression benevolent. Neck and breast plump. Behind head

preserved, chief hues being yellow (on skirt), dull green and slate-blue (on stole, jewels, and under-robe), and a little crimson (on tassels and streamers). Yellow cartouche for inscr. to L. of head, blank.

Painting 1′ 7″ × 7½″, length with head-piece and streamers 3′ 8″.

Ch. i. 009. Paper painting showing *Avalokiteśvara* (Kuan-yin) seated by water; cf. Ch. lvi. 0015, the only other representation in Collection.

A. sits ¾ L. on edge of island or bank, R. foot tucked under L. thigh and L. foot pendent, resting on lotus which grows from stream. R. hand on knee holds willow branch, L. hand flask; Dhyāni-buddha appears on front of tiara; dress and orns. are those of 'Indian' Bodhisattva. Group of conventional willow trees grows behind. Whole fig. enclosed in large circular halo drawn in red outline.

On cloud above on L. appears on small scale man in Chinese magistrate's jacket, long robe, and black head-dress, kneeling with hands in adoration and attended by two boys similarly dressed and with their hair in roll round their necks. Draped canopy fills upper end of picture; at bottom, on ground bordering lake, an altar. Donor, man in the black coat and wide-brimmed hat of donors of *Ch. 00102, etc., stands in R. bottom corner carrying censer. Four small cartouches, uninscribed, are distributed about picture. Drawing and execution superior; colouring chiefly scarlet, light blue, and green; in good condition.

For tradition referring to this type of fig. of Kuan-yin, see *Exhibition of Stein Collection*, p. 12. 2′ 8½″ × 11½″. Pl. LXXIX; *Thousand Buddhas*, Pl. XXIV.

Ch. i. 0010. Painted silk banner with head-piece and side streamers. Bottom streamers lost, and both ends of painting. Shortened upper end has been backed with crimson silk and sewn afresh to head-piece. Latter of plain faded purple silk bound with loosely woven dull blue silk, with broken suspension loop of apricot and buff silk, and streamers of sage-green silk (discoloured). Painting much cracked.

Subject: *Bodhisattva*, perhaps Avalokiteśvara. Stands ¾ L. on pink lotus edged with red, of which only one petal remains. R. arm bent inwards at elbow and hand pendent, thumb, second and third fingers joined; L. before breast holding light blue lotus bud. Painting of same type as *Ch. 001, but inferior work; and dress same except that Bodhisattva wears no under-robe, and an anklet on L. leg. Stole is of non-transparent material, covering both shoulders and arms to elbows, so that there are no armlets. Attached to front of belt is a small square box, enamelled (?), painted dark yellow and bound with gold.

Colouring is gay, skirt being orange with folds emphasized in red, overfall white with border of red and orange; undergirdle dark pink with spot pattern in black and yellow; scarf on breast dull red; stole dark pink with reverse of ultramarine; the streamers of olive, light blue, and red. Canopy and most of the lower part of face are lost.

Nose is long and aquiline with drooping point, eyes oblique with yellow eyeballs; eyebrows a grey line over black, setting of eye and general modelling shown by washes of faint pink as in *Ch. 001. All outlines are black except inside of ear. Tiara crowned with dark pink lotuses. Colouring is fairly preserved, but coarse; lines of drawing uneven, and details (e. g. ear) very carelessly treated. Inscr. cartouche to L. of head, blank. Painting 2′ 1″ × 10½″, length with head-piece 2′ 9½″.

Ch. i. 0011. Silk banner, complete; body made of three sections of plain silk as Ch. 00342, blue, white, and dull crimson. Side streamers bright crimson, one calendered on one side. Head-piece made of two frs. of figured silk, loosely woven, both excellently preserved. (*a*) has deep blue ground, with pattern of flying birds in yellow outlined crimson; complete pattern not recoverable; (*b*) seems to have floral scroll pattern in green and pale blue outlined with white, within circular border of dark blue and green bands also outlined with white. Spandrel orn. outside is white, outlined blue; and ground of whole scarlet. Fr. too small to reconstruct entire pattern.

Triangular head-piece has on one edge border of fine plain plum-coloured silk, calendered on outside; on other, border of fine green diapered silk of lozenge pattern. Weaving of figured silk is loose and fragile as Ch. 0076. Hanging loop of firmly woven yellow satin twill. Bamboo strainers where coloured sections of banner are joined. Length of whole 4′ 3½″, width 6″. Pl. CX.

Ch. i. 0012. Silk painting representing *Kṣitigarbha* as Patron of Travellers, with donors. Complete except for border and in good condition. For other representations, see under *Ch. 0021.

K. sits facing spectator on scarlet lotus, R. leg pendent resting on small lotus, L. bent across, R. hand holding beggar's staff, L. on knee with flaming crystal. Dress and type of face as in *Ch. 0021; under-robe olive-green lined with light red; mantle mottled olive, black, red, and yellow, barred with black; head-shawl dark pink spotted with white flower pattern and having light red border orn. with gilded rosettes. Flesh pink and white with red outlines; circular halo and vesica of rings of olive, light red, blue, and pinkish-white.

Below, donors, standing in somewhat unusual arrangement: man and nun (?) on L., monk and woman on R. Where laity and clergy are mixed, it is more usual to put the ecclesiastics in middle, nearest the dedicator; and also to keep members of the different sexes on different sides. But fig. behind man is evidently intended for nun from pink cheeks, white skin, blue cropped hair, and necklace, while ecclesiastic on other side has black cropped hair and pale brownish complexion; but this may be artist's mistake. Lay donors good examples of *Ch. 00102 type.

Cartouches in upper corners and beside each donor, and dedication panel, yellow or green, all blank.

Workmanship indifferent and colours muddy. 1′ 9½″ × 1′ 3½″. Pl. LXII.

Ch. i. 0013. Painted silk banner, with head-piece, weighting-board, and streamers complete. Painting in excellent condition.

Head-piece of coarse cream-coloured silk painted with green lotus and leaves upon orange ground; streamers and binding of head-piece of dull myrtle-green silk orn. with running scroll of leaves and flowers in blackish paste; one end of head-piece binding replaced by dull red silk; suspension loop of same. Weighting-board covered with fine buff silk damask, woven in all-over variety of key pattern, and stencilled with open lotus and leaves in same black paste.

Subject: *Avalokiteśvara* (Kuan-yin) with scarlet lotus and flask. Fig. sweeps to L. with trailing draperies, holding before it in R. hand flask, in L. scarlet bud. The whole is ¾ L.; the back hollowed, giving a particularly graceful curve to side, and head slightly bent gazing down at lotus. Fig., dress, accessories, and style of work are of type *Ch. 002; fig. specially slim, setting of both eyes shown by a wide semicircular line (see Ch. 009); 'laughing' wrinkles drawn from corner of nose to mouth; mouth rather large and parted, showing teeth.

Colouring very bright; paint, though used only in broad lines and bands along edges of folds as in most other paintings of this class, is applied very thickly, giving a marked roughness to surface and a hard tone to colouring as a whole. Predominant hue a strong blue, approaching turquoise but of a greener tint; this is used for stole, rev. of which is green. Skirt faintly shaded with pink and outlined with crimson; streamers green or solid crimson outlined with touches of brilliant yellow. White used for girdle, streamers of head-dress, eyeballs, and teeth is of peculiarly opaque 'whitewash' quality, making harsh contrast with blue. Lips painted vivid crimson; eyebrows a copper-green line over black; inside of ear, hand, and lower lines of feet, red. Flask of usual round-bodied, long-necked, and stoppered variety, but its body here is white with pink ornamentation, prob. intended to represent porcelain. Lotus underfoot white, with dark pink tips and edges. Canopy complete, a good example of ornate 'Chinese' type, and surmounted by bell-hung valance with vandyked band. For inferior replica, see Ch. lv. 0045.

Painting 2′ 4″ × 6¾″, length of whole 5′ 5¼″. Pl. LXXVIII.

Ch. i. 0014. Linen painting with Chin. inscr., representing *Paradise of Amitābha* (?), in simplified form, with donors. Linen band across top and bottom, with suspension loops at top. A. sits on lotus with Bodhisattva on either side; R. hand in *vitarka-mudrā*, L. below it with red lotus bud (?) in palm; flesh shaded with brown. Canopy on trees above; altar in front with kneeling Bodhisattva on either side; no lake. Accessories and general treatment as in silk Paradise paintings; cf. especially Ch. xlvi. 008. Donors as in *Ch. 00102, etc. Colouring red, olive-green, true green, yellow, light and dark grey. Lozenge border round whole of picture. For interpretation, see Petrucci, Appendix *E*, III. iv. (Complete) 2′ 11″ × 1′ 8″.

Ch. i. 0015. Painted linen banner; apparently never completed, as pointed top is painted but not cut out. No streamers. Clean condition.

Subject: *Avalokiteśvara* (?), standing ¾ L. with hands in adoration. For descr. of type, and list of similar banners, see *Ch. i. 0016. Colouring red, pale yellow, and grey. 2′ × 6½″.

***Ch. i. 0016. Painted linen banner** with Chin. inscr., representing *Avalokiteśvara* (Kuan-yin). Complete, with head-piece, side and bottom streamers, and weighting-board. As throughout linen banners, head-piece is cut in one with picture, and its sides finished with border of different-coloured linen. Border here of bright pink, streamers of brown, linen. Linen used for banners themselves is generally light buff or cream-colour.

In subject and workmanship also this example is typical of the largest class of linen banners (see below), the same fig. being repeated in all, with almost no variation in pose or treatment. In this and three other instances (Ch. 00136; xx. 0012, and lv. 0036), Bodhisattva is identified by inscr. as Kuan-yin; in one (Ch. 0060) as Kṣitigarbha; but type is quite unspecialized, and shows no Dhyāni-buddha, or other distinctive emblems.

Bva. stands on single lotus, sometimes facing spectator, but generally ¾ R. or L., with hands in adoration at breast. Fig. is of 'Indian' type, with slender waist and broad hips; pose stiff, and legs in most instances disproportionately long. Dress, coiffure, and jewels are of 'Indian' type descr. under *Ch. 0088; skirt conventionally painted in a series of V-shaped folds down each leg, or in straight stripes from top to bottom. Halo is circular, of variously coloured concentric rings. Hair is always black; flesh shaded with light red; colouring otherwise chiefly harsh tones of red, olive-green, yellowish brown, slate, and yellow. Workmanship coarse.

For other examples see: Ch. 0060, 00133–4, 00136–7, 00141; i. 0015; iii. 0015, 0017; xx. 0010, 0012; xxi. 009–10; xxiii. 002–4; liv. 009; lv. 0036–43; lvi. 0024; lxiv. 002; for other Bodhisattva banners, with hands in various poses and sometimes with dress in 'Chinese Buddhist' style of *Ch. 002, but in much the same grade of workmanship: Ch. 0061, 00135, 00139, 00140; iii. 0016, 0018; xxi. 0011; xxiii. 006–7; xxvii. 004; xxxviii. 007; *liv. 008; lvi. 0022–3; lxiv. 001; for Buddhas xx. 0011.a; lvi. 0021.

Ch. i. 0016: A. stands ¾ R. Colouring orange, greenish brown, crimson, slate-colour. Inscr. on cartouche in R. top corner, with salutation to Kuan-yin. Painting 3′ 2½″ × 7½″, length of whole 7′ 5″. (Side without inscr.) Pl. LXXXIX.

Ch. i. 0017. Paper painting showing *Six-armed Avalokiteśvara* (Kuan-yin) with two attendants. Stands facing spectator on lotuses upon top of flat rock (Mount Meru ?). Upper hands hold up discs of Sun and Moon; middle hands in *vitarka-mudrā* on either side of breast; lower hands hang by sides, thumbs and forefingers joined, palms out. Moon's disc contains only tree. Avalok. has three heads, with large fig. of Dhyāni-buddha over middle one. His pose is stiff, his dress in 'Indian' Bodhisattva style with short straight over-skirt, as in *Ch. 0088. Behind him grow bamboos.

Attendants evidently represent the Good and the Evil Genius, from their resemblance to figs. in Ch. lvii. 004. Dressed in same way, carrying opened rolls of paper; but their hair is done

in roll round their necks and decked with flowers. Colouring dingy, consisting only of dark greenish brown, grey, red, and dark yellow, and drawing coarse. Blank cartouche (for inscr.) on L. edge. R. lower corner lost and part of R. edge; remainder well preserved. 1′ 10¾″ × 1′ 3¼″. Pl. XCI.

Ch. i. 0018. Paper painting with Chin. inscr. showing *Six-armed Avalokiteśvara* (Kuan-yin), seated, without attendants. He sits on red-tipped Padmāsana, with legs interlocked; upper hands hold up resp. Vajra-topped and skull-headed mace; middle hands in *vitarka-mudrā* on either side of breast; lower hands lie on knees, R. palm downwards with first finger bent, L. palm uppermost with thumb, second and third fingers joined. Dhyāni-buddha on front of head-dress.

General type as in *Ch. 00102, etc.; but drawing coarse and colouring limited to dull green, slate-blue, pink, orange-red, and pale yellow. Flesh uncoloured. Inscr. on cartouche to L. of head containing salutation to Kuan-yin. Torn and broken. Paper loops, for attachment to wall, are sewn with grass string along top and bottom. 1′ 9¾″ × 1′ 3½″.

Ch. i. 0020. Silk banner, complete except for one side streamer; companion to Ch. i. 0011. Body made of three sections: plain blue silk; white silk damask woven in small lozenge lattice-work; and fine red woollen or cotton twill fabric, with bamboo strainers at junctions. Streamers extant and suspension loop are of loosely woven light blue silk; weighting-board as in Ch. i. 0011.

Head-piece shows frs. of three different figured silks, two forming field and one border on one side; border on other side of plain bright green silk. All figured silks well preserved, but frs. too small to show complete design. Largest fr. in field of triangle is woven in firm satin twill, and has white ground. On this a pattern of chevron bands touching at their points and forming lozenges. Bands made of five rows of round salmon-coloured dots (faded); in lozenge here complete an elliptical star also in salmon, outlined with light green. This alternated with another centre pattern, here too fragmentary to be reconstructed.

Both other figured silks loosely woven in style of Ch. 0076. One in triangle shows part of curving floral (?) pattern, in dull crimson on bluish-green ground; one forming border shows bold floral pattern, also fragmentary, in bright grass-green, red, and white on indigo ground. The colour is striking, and treated on the flowers as in much of embroidered and painted floral work; e.g. in large round lotus-like flowers with double ray of petals, the inner ray is indigo, the outer grass-green with red centre and indigo spot at base, both spot and green outer edge being outlined with narrow line of white. Other flowers, with eight narrow pointed petals and sepals showing between, are white with red outlines and indigo centre to petal. Leaves white outlined with red, or grass-green outlined with white and veined with red.

The triangle lined with faded purple silk damask, woven with chevron bands in twill touching at their points and forming lozenges of plain weave, in centre of which again are smaller lozenges in twill. Length of whole 4′ 3″, width 6″. (Head-piece) Pl. CX.

Ch. i. 0022. Banner, complete with triangular top, streamers, and weighting-board. Body of loosely woven silk printed with gamboge ground, and pattern of repeating spots, round or lozenge-shaped, in red. The round spots consist of two cranes with outspread wings, and heads to centre, whirling in circle, with tendrils filling spaces in circumference. See Ch. 00179, etc. The lozenge-shaped groups, whose tips join enclosing the circles, are formed of open many-petalled flowers and tendrils. For general type of design, see above, p. 905. Head-piece and streamers are of loosely woven red silk damask, with pattern of small repeating lozenges; suspension loop of fine firmly woven white silk damask with pattern of repeating concentric lozenge groups.

Across bottom of banner proper, written in ink, 2½ ll. of Khotanese in Brāhmī chars., read by Dr. Hoernle as follows:— . . . pasi salya rarūyi māśta 26 mye haḍai—*myai ahā* yi pasta haiṣṭe beysū sta śrvī (*brvī?*) *ysi* (?) harbīśai āvama prra *ysi* hāṁna sījīde nauda. *yi* *yi*

Banner proper 1′ 10½″ × 8″; length of whole 4′ 5″. Pl. CXIII.

Ch. i. 0023. Paper painting (Kakemono-shape with wooden stick at bottom and bamboo strainer at top) representing *demonic Bodhisattva*, prob. *Vajrapāṇi*. Deity, three-headed and four-armed, half sits, half straddles, ¾ R. against background of flame. L. upper hand holds up Vajra; R. is raised with fingers in clasping position, but attribute not filled in; R. lower hand in *vitarka-mudrā* at breast; L. on knee with palm upturned; Dhyāni-buddha on front of tiara. Dress like Vajrapāṇi of banners (see Ch. i. 004, etc.), with leopard-skin apron, and white-spotted necklace of twisted cord. Third eye in centre of forehead; profile face on R. painted grey, other two flesh-colour. Bird and demon heads appear amongst flames; small boar-headed demon at bottom makes gesture of salutation. Cf. Tantric deities at bottom of Maṇḍalas of Avalokiteśvara, Ch. 00105; xxviii. 006. Broken at top, coarse work; colouring chiefly red, green, flesh-colour, and dark grey. 2′ 7″ × 1′.

Ch. iii. 001. Painted silk banner; upper end of painting lost, and all accessories except extreme top of bottom streamers of olive-green silk. Remainder in good condition and colour well preserved.

Subject: *Bodhisattva*. Stands ¾ L. on red-edged lotus, alternate petals of inner row being pale green. Hands hang low before body, L. lightly crossed over R., and thumb and forefinger of each apparently joined; for same pose, see Ch. 003; lxi. 007. Fig. and workmanship of type *Ch. 002; dress also same except for large mantle like that of Kṣitigarbha in Ch. i. 003 or Bodhisattva in *Ch. xvii. 001, which is worn over trailing skirt and under-robe. Mantle bright crimson lined with blue, and is gathered over arms, but has slipped down from shoulders, leaving upper half of body bare except for jewellery. Skirt and under-robe showing at feet, both olive-green; skirt bordered with purple. Jewels, hair, and type of face as in Ch. 003. Yellow cartouche for inscr. to L. of head, blank. 1′ 9″ × 7½″.

Ch. iii. 002. Painted silk banner with Chin. inscr. Complete except for one streamer, but accessories in bad

condition and painting worn. Head-piece and upper end of painting broken off main piece.

Centre of head-piece plain buff silk painted with lotus design in orange, dull red, buff, and black; border and streamers of dull myrtle-green silk stencilled with flower motifs in blackish paste. One bottom streamer lost, and replaced by band of flimsy dark blue silk doubled. In place of wooden weighting-board are strips of paper from Chin. manuscript cut to same shape, pasted together, and covered with rough scroll and leaf patterns in ink on either side. Two Chin. chars. are scrawled on border of head-piece, and Chin. inscr., half-effaced, on yellow cartouche on L. side of painting.

Subject: '*Bodhisattva who knows no obstacle*', perhaps Avalokiteśvara. Stands $\frac{3}{4}$ L. with hands in adoration, skirt raised to knees, leaving legs bare. Except for face, seems a replica of Ch. xxiv. 006, traced on reverse side. Face full with narrow eyes almost straight, blunt nose, and cheek making an absolutely straight line in profile from eyebrow to mouth. Small rippling moustache and imperial are painted in light green over black, as also are eyebrows.

Despite its cracked condition and loss of much paint, this banner is still one of the most refined examples of *Ch. 002 type of Bodhisattva. The colouring retains much of its glow, and was gay in tone, consisting chiefly of brilliant crimson (found mostly on stole) and bright soft blue (on reverse). Skirt, drapery on breast, and lotus underfoot are dull pinkish purple; streamers, stamens, and centre of lotus, green. Fig. is slight and held very erect; drawing delicate, and ornamental details gracefully finished. Border of skirt, for instance, is here a fluted frill, blue on outside with folds drawn carefully in fine white and black lines, and orange shaded to crimson and Indian red within.

Tiara is simple white fillet with almost no gold work, supporting over forehead star of four lotuses of shaded orange or purple with blue centres, surrounding fifth (blue) lotus on which rests flaming jewel. Halo and canopy tassels and jewels are of same crimson, blue, and green; and tassels are decked at end with rows of small white beads.

Painting 2′ × 6$\frac{3}{4}$″, length of whole 5′ 4″.

Ch. iii. 003. Remains of painted silk banner; light greyish gauze of specially open texture as Ch. xxii. 004. Three bottom streamers of light brown silk. Paint much gone.

Subject: *Avalokiteśvara* (Kuan-yin). Stands $\frac{3}{4}$ L. on red and blue lotuses; frs. showing respectively (1) from bottom of banner to mid-thigh of fig.; (2) drapery at waist; (3) lower part of face and neck with hands supporting flask (?); (4) upper segment of halo. Dress and style of work of type *Ch. 002; colours remaining, salmon-pink, dull blue, green, and crimson.

Length of frs. 8″, 1$\frac{1}{2}$″, 1″, $\frac{3}{4}$″; width 5$\frac{3}{8}$″.

Ch. iii. 004. Large silk painting representing *Thousand-armed Avalokiteśvara* with attendant divinities. Much broken about bottom, but fairly complete in upper half; surface badly destroyed throughout.

For general design and treatment of central fig., see *Ch. 00223, etc. Avalok. single-headed, and has Dhyāni-buddha on front of tiara. Attendants consist of:

(i–ii) above: *Bodhisattvas of Sun and Moon*; Sun with red disc, on R., seated on his five red and white geese; Moon, with white disc, on L., seated on five red or white horses.

(iii–iv) above, at sides: two Lokapālas in armour, seated cross-legged on rocks; on R., with halberd, perhaps *Vaiśravaṇa*; on L., with club, perhaps *Virūḍhaka*. Armour as in Ch. xlix. 007.

(v–x) three Bodhisattvas, unparticularized, on each side, seated one below other; hands in various mystic poses.

(xi–xii) beneath Avalok.'s knees, Nymph personifying Virtue and prob. facing the aged Sage (see *Ch. 00223); but latter fig. with tank, Nāgas (?), and whole middle foreground is lost. Nymph seated, with L. knee raised, L. hand carrying jewel on palm, and R. hand in *vitarka-mudrā*. She wears red and green robes high to neck as in figs. of dancers in Paradise pictures (see *Ch. 0051, etc.) and red coif-like head-dress over plain round metal-orn. cap.

In bottom corners were evidently two seated Lokapālas (xiii, xiv); but only helmeted head of one on R., holding upright club, is preserved.

Crimson, dull green, and slate-blue, with black for hair and coarse yellow for Avalok.'s flesh, were principal colours on dull greenish background. But paint and drawing are both now mostly lost, and workmanship originally was of third-rate quality. 4′ 7″ (incomplete) × 4′.

Ch. iii. 006. Fr. of large silk painting representing *Mañjuśrī* on lion; R. half of procession as Ch. xxxvii. 003 and prob., like it, part of arch-shaped painting, but all edges incomplete. Fr. itself badly broken. Figs. preserved include Mañjuśrī, lion, and Indian attendant; two Lokapālas in armour holding respectively arrow and sword; two Bodhisattvas; three musicians playing cymbals, mouth organ (straight shape), and mouth organ (teapot shape); and in R. bottom corner a nymph supporting hand, not of personage in Chinese dress as in Ch. xxxvii. 003–5, but of standing Buddha. Arrangement and treatment generally as in Ch. xxxvii. 003; but Mañjuśrī sits cross-legged, and his flesh is deep orange-tan. Both his hands are raised: R. with thumb, first and second fingers erect as in blessing; L. apparently in *vitarka-mudrā*, but damaged. Colouring generally light, consisting chiefly of pinkish white on lion and flesh of attendant figs., slate-blue, crimson, and yellow on dress and trappings. Work rather rough. 5′ 4″ × 3′ 5″.

Ch. iii. 0011. Linen painting representing *Avalokiteśvara*, standing, with donors (obliterated). No border or suspension loops. Good condition.

A. stands facing spectator; R. hand raised, holding willow spray; L. stretched stiffly by side, carrying flask with porcelain body, metal neck and foot. Dhyāni-buddha on front of tiara. Good specimen of 'Indian' type of Bodhisattva in fig. and dress; for other examples (amongst linen paintings), cf. *Ch. 0052. Flowered over-skirt, flowered border to skirt, and elaborate jewellery. Colouring bright red, olive-green, yellow, and dark grey. 5′ 9″ × 1′ 10″. Pl. LXXXIX.

Ch. iii. 0012. a–b. Two frs. of bamboo MS. covers, like Ch. xx. 006. (*a*) held together by two bands of silk weaving, with scattered motifs between, and on either side of, bands. Too much worn to show patterns; but isolated motifs are roughly circular, elliptical, or lozenge-shaped; and one, on lower border, suggests running animal with head turned back. Yarns cream, light green and blue, red. (*b*) woven solid with yellow, cream, and light green yarns. Faded almost to obliteration of pattern, but still showing faintly circular four- or eight-petalled rosettes in rows. (*a*) 4″ × 11″, (*b*) 1″ × 11″.

Ch. iii. 0013. Fr. of silk painting on coarse linen backing. Both clean and fresh, but painting mostly lost. Part preserved shows upper half of standing (?) *Avalokiteśvara*, facing spectator. Head lost; L. hand low before body with fingers in mystic pose; R. raised, carrying red mottled vase in which is white lotus bud. Fig. in 'Indian' style (cf. *Ch. lv. 0014, etc.); stole and girdle crimson and dark green; flesh shaded pink with dark red outlines. Traces of conventional willow leaves at sides; of elongated black vesica, rosette-bordered; and of small seated Buddha or Bodhisattva on lotus on clouds to L. Gr. fr. of painting *c.* 8″ × 8″; whole *c.* 1′ 7″ × 1′ 9″.

Ch. iii. 0015. Painted linen banner, with head-piece border of pink linen and bottom streamers of greenish brown. Side streamers lost. Good condition.

Subject: *Avalokiteśvara* (?), standing facing spectator, with hands in adoration. For descr. of type, and list of similar banners, see *Ch. i. 0016. Colouring crimson, yellow, dark green, grey, and slate. Painting 2′ 11″ × 10″, length of whole 7′.

Ch. iii. 0016. Painted linen banner, with head-piece border and side streamers of brown linen. Torn at top; otherwise good condition.

Subject: *Bodhisattva*, standing facing spectator; R. hand in *vitarka-mudrā* at breast, L. below it turned down from wrist with palm open and fingers hanging. General type of fig., dress, coiffure, etc., as in *Ch. i. 0016; q.v. for list of similar banners. For replica, see Ch. xxi. 0011. Colouring crimson, orange, greenish brown; fair workmanship. 3′ 1″ (with head-piece) × 6¼″.

Ch. iii. 0017. Painted linen banner; companion to preceding, retaining head-piece border and side streamers of brown linen; torn and part of R. side lost.

Subject: *Avalokiteśvara* (?), standing ¾ R., with hands in adoration. For general descr. of type, and list of similar banners, see *Ch. i. 0016. Colouring crimson, salmon-red, and greenish brown; fair workmanship. 3′ (with head-piece) × 6¾″.

Ch. iii. 0018. Tattered remains of linen banner painting, showing *Bodhisattva*, who stands facing spectator; R. hand in *vitarka-mudrā*, L. by side. Colouring red, pink, and brown. *C.* 2′ × 9″.

Ch. iv. 001. Frs. of large silk painting, representing *Paradise*, prob. of *Amitābha* (*or Śākyamuni?*). General design as in *Ch. 0051, etc. Only piece of any size remaining comes from L. side, and shows Avalokiteśvara, seated, with attendant Bodhisattvas under canopied trees. He sits with L. leg in European fashion, R. bent up, R. hand on hollow of thigh, and L. carrying vase of ambrosia on palm. Vase appears also on central orn. of his tiara. Above is seen part of Lake, with small Buddhas filling sky. Part of corresponding fig. of Mahāsthāma remains from R. side of picture. On inner edge of both frs. signs of group of shaven disciples, one particularly well-drawn head beside Avalokiteśvara remaining intact.

Smaller frs. show parts of standing Bodhisattva groups from bottom corners; Buddha in red robe, prob. also from bottom corner, seated European fashion ¾ R.; a Garuḍa; and small fig. of a man, naked except for loin-cloth, apparently wrestling with another of whom only legs remain, clad in black tights. Work somewhat hasty in style, but drawing of figs. good; chief colours remaining, crimson, slate-blue, and dark purple, much faded.

Size apparently was *c.* 5′ 6″ × 5′.

Ch. iv. 002. Fr. of silk embroidery cut from larger piece. Edges raw. Worked on thick silk gauze like Ch. 00332 with lining of thin plain silk, both dark purple. Shows a Buddha standing on lotus, R. shoulder bare, R. hand holding alms-bowl at breast, L. arm wrapped in mantle and gathering up end in hand as in large embroidery Ch. 00260. Halo and vesica oval, latter flame-bordered; B.'s face full and level-eyed. Whole worked solid, and through both gauze and lining, in close rows of fine chain-stitch with silk of dark blue, Indian red, pinkish red, light blue, and green. Under-robe of striped blue; mantle in oblong panels of Indian red and pink, separated by bars of dark blue narrowly bordered with green. Outlines throughout were apparently in gold laid on strips of paper and couched with yellow silk thread, but this mostly perished except the couching. Fine work, fairly preserved. 4¼″ × 2½″. Pl. CVI.

Ch. v. 001. Large silk painting representing *Paradise of Amitābha* (*or Śākyamuni?*), with side-scenes showing legend of Ajātaśatru and meditations of Queen Vaidehī, as in *Ch. 0051; composition more elaborate, but on same lines. Complete except for border and lower edge, but surface worn and colouring very dim.

Presiding Buddha sits with legs interlocked in adamantine pose and hands in attitude of 'best perfection'; i. e. both are in *vitarka-mudrā*, and L. is turned with palm to breast, but instead of touching, as is usual in this *mudrā*, they are slightly apart. On his breast a sacred mark corresponding to *ūrṇā*, surrounded by flame. His hair and outlines of his flesh are black, his R. arm bare except for edge of his mantle over shoulder.

Avalokiteśvara and Mahāsthāma sit with legs slightly unlocked, outer hands in *vitarka-mudrā*, and hands near the Buddha held up horizontally, before breast or at side, with palm uppermost. The rest of company consists of Bodhisattvas kneeling with hands in adoration; ten priestly disciples, shaven but unhaloed, ranged in a row in background;

dancer and musicians (here on narrow separate terrace in centre foreground); and two black-robed subsidiary Buddhas with their attendants (on platforms before two-storied pavilions) in bottom corners. The robes, coiffures, and orns. of all Bodhisattvas, as in *Ch. 0051, are of 'Indian' type; their robes usually dull crimson or slate-blue, often flower-spotted, and scarves on their breasts dark brown spotted with white.

The eight musicians play on pipe, reed-organ (teapot-shape), reed-organ (straight shape), lute, flute, clappers, and harp; all instruments of type described in *Ch. lii. 003 (see Appendix *H*) except the second reed-organ, in which reeds are bound together in row, upright, and blown from top.

The Lake full of lotuses on which stand Garuḍas (single- and double-headed), peacock, and crane; and of lotus buds containing infant souls. Between Amitābha's canopy and six-tiered umbrellas of the chief Bodhisattvas stand two elaborate standards of decorated metal-work topped by flaming jewels. In background is façade of celestial mansions, here three double-storied pavilions linked by curving galleries, whose indigo roofs give unity to top of picture. Amongst upper roofs float small Buddhas on puffs of cloud, also beribboned musical instruments—lute, harp, and drum.

Much of detail in colour has disappeared, but drawing generally of broader style than in majority of large paintings, and in side-scenes exceptionally rough. There is an absence of diversity in figs. and poses and of elaborate orn. in dress and haloes, the latter being painted in plain discs, or at most in variegated rings of plain colours.

Colouring dim but impressive, and dark in tone. It must have looked considerably brighter before all the light paint disappeared. General tone now a dark brown (in place of the more usual green); from it only the black of hair, the dull crimson and blue of robes, and the indigo of roofs, now stand out.

The *side-scenes* (see *Ch. 0051) are in usual secular Chinese style, and represent:

On R. (i) Śākyamuni on Mt. Gṛdhrakūṭa; (ii) Śākyamuni's former incarnation as the white rabbit; huntsman not shown; (iii) Ajātaśatru's former incarnation as hermit; seated in his cave, while in front a traveller, dismounted, is beating his horse; (iv) Ajātaśatru pursuing his mother, and the minister intervening; (v) Bimbisāra or Vaidehī (?) in prison at top of high tower, down front of which a small fig. is falling headlong; (vi) Buddha appearing in cloud to Bimbisāra and Vaidehī; (vii) some one remonstrating with Ajātaśatru on his treatment of his mother (?); cf. Ch. lv. 0033. *iv*, etc.; Vaidehī present on L.; (viii) much destroyed; same unidentified scene as Ch. lv. 0047. *vii*, etc. Closed door here in background.

On L., Queen Vaidehī meditating on *Sukhāvatī*, as follows: (ix) on the Sun and (running) Water; (x) on the Ground of *Sukhāvatī* (?), a rectangle divided into coloured squares; (xi) on the Mansions of *Sukhāvatī*, a pavilion; (xii) on the Music, a drum, pipe, and clappers laid out on a mat; (xiii) on a three-tiered canopy; (xiv) on the Jewel-Tree; (xv) on the Lake, containing lotuses; (xvi) on the Bodhisattva Avalokiteśvara; (xvii) on the Bodhisattva Mahāsthāma; (xviii) on the Buddha Amitābha; (xix) on the same.

Very rough work, in style like that of banner Ch. 0039; Queen Vaidehī's coiffure same as there, a roll on neck with large lotus flower on top of head. No cartouches. 5′ 2″ × 4′.

Ch. xi. 001–2. Two leaves of illustrated Chin. MS. book; adjoining inner sides show painting of *Buddha*, with attendant monks and Bodhisattvas, seated behind altar with worshipper kneeling in front. Group ¾ L.' Red-flowering star-leaved trees overhead. B. has R. hand raised as if in blessing, L. in *vitarka-mudrā*. Only colouring red, black, dark pink, and some green; drawing rough. On back of R.-hand leaf, drawing of *Vajrapāṇi* striding L., with head turned back, R. hand clenched, L. hand raised brandishing thunderbolt. Drawing rough but spirited, touched in places only with red paint. On back of L.-hand leaf, 5 ll. Chin. chars. in good condition.

Size of leaf $5\frac{1}{2}'' \times 4\frac{3}{16}''$. Central picture. Pl. XCII.

Ch. xi. 003. a–b. Two frs. of illuminated Chin. MS. roll containing treatise on names of the Thousand Buddhas; much torn. At head of each name, miniature of small seated Buddha. (*a*) contains beginning, with part of paper painting at R. edge torn away. See also Ch. 00188, 00210. $10\frac{1}{2}''$ and 1′ 1″ × 1′.

Ch. xi. 004. Fr. of paper painting from end of MS. roll, showing *Buddha*; lower part in crimson robe, including upper part of feet, L. hand held outwards by L. knee, and part of halo and Padmāsana. From lowness of halo which comes down to hand, position of Padmāsana which outlines fig. from hand to ankle, arrangement of drapery folds, and comparative nearness of hand to ground, it is prob. that fig. was seated, European fashion, not standing. It may therefore represent Maitreya. Good execution. $2\frac{3}{4}'' \times 3\frac{3}{4}''$.

Ch. xi. 009 [*recte* **xl. 009**]. **Paper painting,** showing *Buddha* seated in meditation within shrine. Shrine in Chin. style with hexagonal base, tapering hexagonal (?) central part in which Buddha sits, and pagoda roof with upturned eaves and umbrella-decked spire hung with chains. Buddha's flesh yellow, hair blue. Conventional lotuses grow on tall stiff stems on either side; lotus blossoms and flaming jewels with green streamers fill air. Shrine outlined in broad lines of reddish brown, which with slate-blue, pale green, and yellow make up colouring. Rough work; paper much broken where green paint was used. 1′ $4\frac{3}{8}''$ × 1′.

***Ch. xvii. 001. Painted silk banner**; upper end with head-piece and side streamers lost; three bottom streamers (out of four) preserved, of faded light green silk orn. with flower and leaf motifs in black paste. Painting slightly cracked, otherwise in excellent condition and very clean.

Subject: *Bodhisattva* (unidentified). Stands ¾ L. upon two lotuses, hands clasped before breast with thumbs (?) and first fingers interlocked, and remaining fingers of R. hand folded over L.

Physical type of Bodhisattvas, accessories, and general style of work as in *Ch. 002, etc.; but dress different, consist-

ing of under-robe and large mantle like Kṣitigarbha's in *Ch. i. 003, etc. Bodhisattva coiffure and all Bodhisattva jewellery are here, however, retained. Face carefully drawn; with minute curling moustache and imperial in black, *ūrṇā* in red, and inside of ears (pierced but hardly elongated) in same. Under-robe falls in loose folds about ankles; jewellery comparatively simple, tiara consisting only of white fillet with branch orn. in centre supporting two crimson lotuses with blue centres; and tasselled orns. at ears.

Colouring very bright and exceptionally fresh; mantle brilliant crimson, barred with black as in *Ch. i. 003, and lined with ultramarine blue; under-robe pea-green bordered with dark pink and lined with scarlet; and same colours repeated in halo, canopy, and jewels. Lotus under R. foot has double row of petals, shaded and outlined with dark pink; that under L. has single whorl of curling petals, coloured light green or blue on outer edge, dark pink or orange within, and light blue or green in centre; bands of colour divided by narrow black and white lines; upper-side of one petal corresponding to upcurled under-side of next. Yellow cartouche for inscr. to L. of head, blank. Workmanship carefully finished throughout.

For similar Bodhisattvas, see Ch. 00142; lv. 006; and cf. also *Ch. i. 003.

Painting 2′ 1″ × 6⅞″, length with streamers 5′ 1″. Pl. LXXX.

Ch. xvii. 002. Paper painting from same series as Ch. 00162, etc., showing divinity unhaloed, perhaps Tantric form of *Avalokiteśvara*, standing on yak. Fig. six-armed, with distended eyes and frowning brows; upper hands hold up discs of Sun and Moon (containing no figs.); its middle pair of hands are in front of body, R. in *vitarka-mudrā*, L. holding flask; its lower hands hang by its sides, R. with forefinger only extended, L. carrying noose. Fig.'s hair and head-dress same as in companion picture; dress that of 'Indian' Bodhisattva, but with skirt reaching only to knees, and legs below bare except for anklets. Style and colouring as in Ch. 00162. In L. top corner is blank cartouche for inscr. Pin-hole in corners. Good condition. 1′ 6″ × 1′ 0⅝″.

Ch. xvii. 003. Paper painting, from same series as Ch. 00162, etc., showing *Virūḍhaka*. Stands astride, head turned over L. shoulder; R. hand at breast with thumb, second and third finger joined, L. arm thrust out holding head of club, which rests upon ground. Dress that of the more 'Indian' type of Lokapāla (see *Ch.0010, *General Note*), but without corslet. Coat of mail painted plain on body, and in horizontal stripes on skirts; but scales not shown. Features large and coarse, with prominent cheek-bones and round staring eyes. General style and colour as in Ch. 00162. Good condition. 1′ 6¼″ × 1′ 0½″.

Ch. xviii. 002. Part of illustrated and dated Chin. MS. book, containing representations of *Four Lokapālas*, cf. Ch. xxii. 0026. Date given in text, A. D. 890. Only five leaves are preserved: last two of text, single, written on each side, and containing respectively 9, 9, 5, and 8 ll. of Chin. chars.; a single leaf, blank on one side, and showing on other painting of a Lokapāla; a leaf (double, i. e. two pasted back to back) showing a Lokapāla upon either side; and a fifth leaf (double) with Lokapāla painted on inner side, the outer being pasted over with remains of purple silk damask and forming the cover.

The text contains passages from various Buddhist Sūtras and a colophon by scribe who transcribed them and made the illustrations.

The latter are finely drawn and coloured, and each bears Chin. inscr. identifying the Lokapāla in question. Each is seated on two crouching demons, one leg pendent, other bent across at knee. Their dress consists of coats of mail, corslets, breeches, greaves, shoes, arm-guards, and tiaras or helmets, like the Lokapālas of the silk banners: see *Ch. 0010, *General Note*. Details of dress are elaborately orn., the centres or lacing holes of scales picked out in green, corslets decorated with scroll orn., upper girdle and border of coat of mail sprinkled with wheel orn., and collars and breeches over knees with rosettes. Each has a flame-edged halo, and an attendant demon standing behind. The latter have distended muscles and monstrous heads, while faces of Kings are human and non-grotesque. In detail the chief characteristics of the figs. are as follows, in order from R. to L.:

(i) *Virūḍhaka*, Guardian of South. R. hand raised and held out empty, L. holding upright club. Tiara with red streamers. Armour-scales round-edged, overlapping downwards, on shoulders and body; oblong, overlapping downwards (?), on skirts. Attendant holds up snake by throat, in R. hand; club in L.

(ii) *Dhṛtarāṣṭra*, Guardian of East. R. hand raised holding arrow, L. holding bow. Helmet as in Ch. 0040; armour-scales round-edged, overlapping downwards, on shoulders; oblong, overlapping downwards (?), on skirts; represented on body by star-shaped conventional diaper, as in Ch. xxvi. a. 001. Attendant holds arrow-head (?).

(iii) *Virūpākṣa*, Guardian of West. R. hand on thigh, L. holding naked sword upright. Long white beard and white top-knot; tiara with streamers. Scales of armour oblong on skirts, apparently overlapping downwards; round-edged, overlapping downwards, on body and shoulders.

(iv) *Vaiśravaṇa*, Guardian of North. R. hand holds halberd, L. miniature shrine. On head three-leaved crown. Wears no corslet, but tight-fitting coat of mail as in Ch. 0087; scales shown on body and skirts by star-shaped conventional diaper, on shoulders oblong. Attendant carries indistinguishable bottle-shaped object in R. hand (cf. Ch. 00158, 00217), and has head enveloped in wild beast skin, mouth and paws framing face.

Colours chiefly red, green, slate-grey, yellow, and brown; torn at edges of leaf, but condition otherwise good. Size of leaf 5⅜″ × 5½″. Pl. XC.

Ch. xviii. 003. Silk painting with Chinese inscription representing *Avalokiteśvara* (Kuan-yin), standing, without attendants. Complete, with no border, but finished round edge with painted band of red. Painting in 'Indian' style of great delicacy and refinement, and without a pendant in Collection. Bare upper part of fig. with dull red outline and

comparatively faint pink colouring, unfortunately much faded, while more solid and brilliant colouring of dress and jewels is disproportionately well preserved.

Fig. stands facing spectator before two small dark pink lotuses with copper-green centres; both arms raised from elbow, R. holding willow spray over shoulder, L. carrying short broad-mouthed flask of mottled blue and pink on palm. Head turned slightly towards R. shoulder, with eyes downcast and serious mild expression.

Dress consists only of skirt of brilliant scarlet sprinkled with small blue trefoils, tied round hips with narrow blue girdle, and falling straightly to ankles; and of long narrow scarf or stole of dark pink and green, wound round body from L. shoulder and hanging about arms. Copper-green sash is also loosely knotted round hips, and white draperies flutter at shoulders.

Jewellery gilded, with black outlines, set with bright scarlet, blue, and copper-green stones, and hung with strings of pearls. Tiara consists of gilded circlet with ball over forehead supporting Dhyāni-buddha and high gilded ornaments at side; but within it rises further a tall cylindrical head-piece in dark pink and green enclosing hair which overflows in a top-knot (almost effaced).

Hair about forehead and shoulders painted light blue, eyebrows copper-green. All the drawing of person in dull red except eyelashes, pupils of eyes, and dividing line of lips, which are black, and only features remaining distinct in face. Halo a large green disc wreathed with scarlet flame. Open lotus-flowers fall through air.

Inscription in L. upper corner records that painting was offered by a son in memory of his father [A. D. Waley]. For other standing figs. of Avalok., unaccompanied, cf. *Ch. 0088.

1′ 10″ × 1′ 2¾″. Pl. LXX; *Thousand Buddhas*, Pl. XX.

Ch. xx. 001. Painted silk banner; all accessories and upper end of painting lost; remainder in fair condition.

Subject: *Samantabhadra* on white elephant led by Indian attendant, the whole ¾ L. For other examples, see Ch. xxii. 0021; xlvi. 006. S. sits on pink lotus, R. leg bent across from knee, L. hanging; R. arm raised from elbow and held forward, L. on knee; both hands open and held slightly downward with palm up as though bestowing gifts. Bodhisattva of type *Ch. 002 in dress and physical features, with long full oval-shaped face, large aquiline nose, *blue* eyes gazing down to L., and curved red lips parted and smiling. Expression gracious and benevolent. Upper part of head with halo and tiara lost.

Elephant steps forward to L., with L. forefoot raised, and head turned back towards attendant, who leads it by crimson rope. R. tusk only is visible and is triple. Harness so far as visible consists of jewelled head-stall, breast-band hung with fly-tassel and metal orns., girth, and saddle-cloth. Its skin is white, shaded with pink on breast, inside of ears, and curled trunk; toes grey. Wrinkling of loose skin down legs and at corners of small shrewd eyes is shown by series of short black lines, and animal generally is drawn with truth and expression.

The attendant is painted dark purple all over, and has low sq. head with coarse features, prominent jaw, straight eyes, and mass of bunchy black hair. He wears loin-cloth, girdle, narrow stole, and simple anklets, bracelets, armlets, and fillet. Under his and elephant's feet are pink and green lotuses, and to L. of S.'s head is yellow cartouche (blank) for inscr.

Colouring quiet, consisting mainly, apart from elephant's white, of very dull green carmine and purple with a little orange; surface worn; workmanship good.

1′ 11″ × 7″. Pl. LXXXII.

Ch. xx. 002. Painted silk banner; upper end of painting and all accessories lost.

Subject: *Buddha*. Stands facing spectator on large lotus, R. hand raised in *vitarka-mudrā*, L. open before breast, palm up, second and third finger bent. Dress same as in Ch. xxiv. 005 in arrangement and colour, but mantle end thrown over L. shoulder from in front, and no cord. Face coarsely drawn, with large oblique eyes gazing down under heavy lids, elongated ears pierced and turning out stiffly at lobes, wisp-like curling moustache and imperial. The latter and eyebrows are painted greenish grey over black; face, breast, hands, and feet a harsh yellow shaded with red and with red outlines; hair a blackish-grey. *Uṣṇīṣa* and all above lost. Lotus underfoot painted in decorative bands of white, slate, black, yellow, crimson, and green, following outline of petals. Remains of circular halo.

Silk much speckled with dirt; work originally coarse, and colours dingy or crude.

1′ 8″ × 7″.

Ch. xx. 003. Silk painting representing *Buddha between Bodhisattvas*, with donors; prob. Amitābha with Mahāsthāma and Avalokiteśvara. Complete border of coarse brown linen with suspension loops preserved, and upper half of silk painting. Lower half lost, but bottom end to height of 9″ replaced by strip of coarse buff linen, showing two male donors kneeling on either side of blank panel for inscr.

Upper half, somewhat broken and worn, shows Buddha seated in adamantine pose on lotus, with circular vesica and halo behind, and canopy above hanging on couple of trees. On either side stands a Bodhisattva, half hidden by vesica. The Buddha has R. hand in *vitarka-mudrā*, L. at breast with palm hanging down, second, third, and fourth fingers bent up, thumb touching second finger, and forefinger pendent. Thus *mudrās* practically same as Amitābha's in Ch. xlvi. 008. The Bodhisattvas have their hands in same poses, but hold also in half-closed hands stemless lotus buds, green and blue. Colouring and type of figs. and accessories as in large Paradise pictures (*Ch. 0051, *lii. 003, etc.), but work is rough. Donors as in *Ch. 00102, etc., one holding censer, the other scarlet lotus on a platter. See also Ch. 00224. Orig. size of painting with border 5′ × 2′ 3″. H. of silk painting preserved 2′ 1¼″.

Ch. xx. 004. Silk painting with Chin. inscr., representing *Six-armed Avalokiteśvara* (Kuan-yin) with Bodhisattvas of Sun and Moon; Maitreya and donors below;

cf. *Ch. 00102, etc. Made of one breadth of silk (selvedge to selvedge 1′ 10″), fairly intact but surface much worn, and hole burnt in one place. No border; top broken, but two lemon-yellow silk suspension loops still attached.

Avalok. sits with legs interlocked; was prob. intended to be eleven-headed, but large heads in profile below have been omitted, and eight above are merely rough circles with barely trace of features. Upper hands, L. and R., hold up respectively discs of Sun and Moon, the former still showing the three-legged bird, inhabitants of latter effaced; middle hands in *vitarka-mudrā* on either side of breast; lower outstretched sideways, but too carelessly drawn to show fingers. Bodhisattvas on either side stand ¾ towards centre with hands in adoration; inscriptions hastily added on background reverse their identities, making deity by Avalok.'s L. hand Bodhisattva of Moon, and other on R. Bodhisattva of the Sun. Dress and coiffure of all three of 'Indian' Bodhisattva type as in *Ch. 00102, etc.; standing deities wearing also tight plain over-skirt seen in Ch. 00125, etc. Flesh white shaded with orange, but paint much lost.

Lower end of painting contains central panel with dedicatory inscr., 3 ll., well preserved, giving no date (see Petrucci, App. *E*, II). On R., kneeling monk with censer, and novice also shaven and in monk's dress, standing, holding flat long-handled fan as in Ch. 00224, orn. with flying birds and cloud-scrolls. On L., evidently over effaced fig. of second donor (see traces where paint has worn off at head), Maitreya, in Bodhisattva dress of more ample *Ch. 002 type, seated cross-legged on lotus with hands in adoration. Identity fixed by inscr. scrawled on background. Second inscr., almost illegible, added on background in front of novice.

Drawing throughout of roughest and most perfunctory description; colouring poor, limited to orange, dingy green, and pink on greyish-green background, with addition of black and white on decorated haloes and vesicas; paint much lost. 1′ 11½″ × 1′ 10″.

Ch. xx. 005. Silk painting with Chin. inscr., representing *Avalokiteśvara* seated, with attendants and donors. Date as given by inscr. A.D. 891. Complete and in fair condition, with border of thin silk damask woven in small lozenge lattice-work, and printed with four-armed conventional floral spots in dark blue, green, and yellow, on fawn ground.

Avalok. sits facing spectator on light-coloured lotus supported on tripod, which again rests on front wall of small tank. From latter spring two scarlet lotus-buds on long many-leaved stiffly curving stalks, which fill sides of picture. Avalok. has R. leg bent across; L. leg pendent; R. hand raised and held outwards with pot containing small lotus plant on palm; L. hand on knee holding rosary; Dhyāni-buddha on front of massive conical tiara. Fig., dress, and jewels of 'Indian' type (see *Ch. lv. 0014, *00102?); face short and round with straight eyes; third eye in middle of forehead; hair black, spread on shoulders; flesh pink and white with red outlines; slim waist.

Circular vesica of petal and vandyked ray orn., and circular halo of waving rays. Canopy hanging on group of star-leaved flowering trees. On trails of cloud above the growing lotuses kneel two miniature Bodhisattvas offering platters of flowers. Spaces in background filled above by clappers, guitar, and two flutes, tied with ribbons; and below by lotus sprays.

Donors, divided off by band of Chin. meander pattern, consist of three nuns kneeling on R., monk, woman, and man on L. Monk's and nuns' costumes as in Ch. xx. 004 and liv. 006 resp., but black replaced by chocolate. Man and woman wear long belted coat, trailing skirt, and wide-sleeved jacket, of same general type as in *Ch. 00102, etc., but without detail or orn., and chocolate-coloured instead of black, like nuns'. Man also has black cap with close upstanding brim instead of wide hat, and lady no pins in hair. Short cartouche with inscr. before each, and dedicatory inscr. (8 ll.) in middle; in L. top corner another inscr. (2 ll.) with salutation to Avalok. Cf. Petrucci, Appendix *E*, II.

Drawing poor; colouring, on background of greyish green, chiefly crimson, olive and copper green, dark orange (on jewellery, tripod, border of tank, etc.), pink and white (chiefly on fig., halo, vesica, and Padmāsana, but mostly lost). For other seated Avaloks., cf. Ch. *00102, 00167.
2′ 8¾″ × 2′ 0½″.

Ch. xx. 006. Part of manuscript roll-cover made of split bamboo slips held together by bands of weaving in thick silk yarn; border, tying ends, etc., lost. Bamboo woven in same fashion as in bamboo roll-cover, *Shōsōin Catalogue*, iii. Pl. 166; but there the weaving covers the whole, and here it runs only in bands necessary to hold slips together. The bands are of widths varying from ⅜″ to 1″, and worked in tent-stitch in dark blue, brown, green, pale blue, yellow, and white on striped ground of same colours. At the ends are two wider slips round which yarns are knotted and then cut off. At the sides the bamboo is broken off short. In one corner is worked in same fashion as bands a small sq. panel with Chin. char. Whole faded and stained, and has been lined with paper now mostly lost.

Pattern of woven bands consists of conventional geometric forms, including: elongated lozenges; crosses with equal arms ending in trefoils making another type of lozenge; adjoining triangles making hour-glass shapes, and stems placed horizontally with forked roots and volute branches supporting a trefoil head. See above, p. 907, and for other fr. specimens, Ch. iii. 0012. a–b. 1′ 5″ × 10½″. Pl. CVI.

Ch. xx. 008. Painted silk banner, with head-piece and three bottom streamers of brown silk (detached). Head-piece has inner border of buff silk printed with lighter flower pattern, and outer of plain brown silk as of streamers. Interior of triangle is of silk continuous with that of main banner, showing at back remains of rosette-patterned painted valance and other floral orn.; front covered with patch of blackish-brown silk. Suspension loop of coarse red herring-bone cotton (?) material. Painting well preserved.

Subject: *Scenes from the Life of Buddha*. Banner, Chinese in style, belongs to series Ch. 0039, q. v. for description of colouring, architecture, etc.

Scene 1. *Dispatch of messenger by King Śuddhodhana* in pursuit of his son. King sits to R. on palace verandah; messenger on crimson horse receiving his instructions.

Scene 2. *Messenger on his quest.* He carries red pennon, and horse (here bay with red spots and white mane and tail) gallops to L. Miniature mountains in background.

Scene 3. *Messenger's return with report to King* (?). Latter seated as before on verandah, while two musicians squatting on mat outside beguile him with flute and pipe.

Scene 4. Unidentified, perhaps part of scene (3). Shows part of enclosure containing lotus tank and bamboo tree, and bounded by high fence. Fence of green wickerwork with red posts and open railing above. In one corner is an entrance, outside which stands a small hexagonal shrine (?) of the same style of architecture as the palace. Through one of its sides is seen oblong yellow object within. Higher up, but detached from King's musicians, kneels man in white coat, playing on set of clappers and gazing towards enclosure.

Painting well preserved, but white paint as usual much lost; drawing rather less rough than in preceding banners of series. The men wear long belted coats, red or dark purple, and close-fitting black caps with peak standing up at back and two flying tails behind. The messenger has top-boots. The King wears a long robe and over it wide-sleeved jacket in which he muffles his arms. He seems to wear no head-dress, but top of his head in both scenes much effaced. Three cartouches only (blank), on alternate edges, opposite scenes (1), (2), and (4). This perhaps shows that scenes (3) and (4) are one. For representation of same scenes, cf. Ch. xxvi. a. 003; xlvi. 004, 007; lxi. 002.

Painting 1′ 10½″ × 7½″; length with head-piece 2′ 8″. *Thousand Buddhas*, Pl. XIII.

Ch. xx. 009. Linen painting representing *Avalokiteśvara* (?), seated, with donors. No border, but suspension loops at top; good condition; colours fresh. A. sits cross-legged on lotus; R. hand in *vitarka-mudrā* at breast, L. in *bhūmisparśa-mudrā* on knee; green lotus bud (?) on front of tiara. Dress, physical type, and accessories as in silk paintings *Ch. 00102, etc. Donors, three men on R., three women on L., standing, in garb of donors of *Ch. 00102. Cartouche for donors, panel for dedication, and cartouche to R. of Avalok., all blank. 2′ 8″ × 1′ 9″. Pl. LXXXVIII.

Ch. xx. 0010. Painted linen banner, with head-piece border of yellow linen, and streamers of dark grey. Good condition.

Subject: *Avalokiteśvara* (?), standing ¾ L., with hands in adoration. For descr. of type, and list of similar banners, see *Ch. i. 0016. Colouring dark yellow and grey, crimson, and slate-blue. Painting 1′ 5″ × 5¾″, length of whole 4′.

Ch. xx. 0011. Painted silk banner; both ends of painting and all accessories lost; remainder broken at edges, but otherwise well preserved, and clean.

Subject: *Virūpākṣa, Guardian of the West.* Apparently a replica of Ch. 0022, *0035 (q. v.). In this instance, head, dull blue halo, red and green clouds, and bells of valance above are preserved complete. But drawing weaker (e.g. in details such as hands and mouth), and colouring pale, so that whole effect is much less vivid and vigorous.

Hair as before is brownish red, and mantle purple. Colouring consists of light red on skirt, draped breast-girdle, and appliqué discs of corslet, arm-guards, and greaves; pale yellow and green elsewhere. Flesh too is left the light greyish white of silk shaded with very faint pink. Scales of armour above belt round-edged, painted in light yellow and red; those below, oblong, and painted pale blue and white. Yellow inscr. cartouche to L. of face, blank.

1′ 10¼″ × 7¼″. See *J. of Indian Art*, 1912, No. 120, Pl. 2.

Ch. xx. 0011. a. Painted linen banner, retaining head-piece border of bright pink linen, streamers lost; fair condition.

Subject: *Buddha*, standing facing spectator; R. hand in *vitarka-mudrā* at breast; L. horizontal below it, open, with palm uppermost. Under-robe of striped grey and white; red mantle drawn partially over R. shoulder, rest of R. arm bare; flesh pale yellow; hair black. Rough work. Painting 2′ 1″ × 8″, length of whole 2′ 9″.

Ch. xx. 0012. Painted linen banner with Chin. inscr.; apparently not finished; no streamers, and pointed top painted but not cut out. Fair condition.

Subject: *Avalokiteśvara*, standing ¾ L., with hands in adoration. For descr. of type, and list of similar banners, see *Ch. i. 0016. A specimen of worst sort; bad drawing; grotesque features; colouring only greenish brown and crimson besides black. Inscr. consists of salutation to Kuan-yin. 2′ 2½″ × 5¾″.

Ch. xx. 0013. Paper banner, cut out in parts like those of silk banners and pasted together. Triangular top filled with drawing of lotus-flower and leaves; streamers painted dark grey with running stem and leaf orn. in yellow; remainder uncoloured.

Subject: *Bodhisattva*, standing ¾ L. on lotus, with hands in adoration. Dress and jewellery of 'Indian' Bodhisattva type arranged as in *Ch. 0052 (linen painting). In front of tiara four jewels arranged in pyramid. Circular halo, and draped canopy above with jewel fringe. Black cartouche for inscr. on L. Rev. same with omission of some ornamental details. Rough drawing. Condition good.

Picture 1′ 3″ × 4⅝″, length of whole 3′ 3″. Pl. XCIX.

Ch. xx. 0014. Paper banner like preceding. One side-streamer lost. 1′ 2¾″ × 4½″, length of whole 3′ 1¾″.

Ch. xx. 0015. Painted paper banner, complete. For companion banners, evidently forming series, see Ch. xxii. 0032; lxiv. 003–5. Main piece cut out in one with top, and streamers with weighting-board; streamers not divided longitudinally. In triangle at top, Buddha in meditation on lotus.

Subject: *Bodhisattva*, standing facing spectator; R. hand in *vitarka-mudrā*, L. by side holding fold of stole. Fig., dress, coiffure, and jewellery of 'Indian' type as in Ch. 00125. Legs excessively short. Circular halo; blank cartouche for inscr. on L. Coarse workmanship; colouring only dull red, green, slate, and yellow; paper stout, brown, much speckled with dirt.

Painting 1′ 5″ × 7¼″, length of whole 3′ 5½″.

Ch. xxi. 001. Silk painting with Chinese inscription, representing *Avalokiteśvara* standing, with side-scenes and donors. Date given by inscription A.D. 963. Painting fairly intact (without border), but surface much worn and discoloured.

Fig. stands leaning slightly from waist to L. p., facing spectator, on flat stiff Padmāsana, raised six inches above bottom of picture. Behind, elliptical vesica framing fig. to ankles, and horseshoe halo, with peak of flame. R. hand raised in *vitarka-mudrā*, holding between finger and thumb long-stemmed lotus which supports Dhyāni-buddha; L. by side, carrying flask. Dress and jewellery of 'Indian' Bodhisattva type (see *Ch. lv. 0014), with skirt raised by jewelled chains to show ankles and anklets. Flask white with red outlines, hair light blue. Small canopy overhead with hovering nymph on either side throwing flowers or carrying censer.

Down sides of picture, scenes of danger or calamity. These are in Chinese secular style, and represent: on R. (i) above, man with head, hands, and feet imprisoned in boards; (ii) man pursued by camel; (iii) man pursued by another flourishing sword; on L. (iv) above, man pursued by rider on horseback with sword; (v) small, man fallen in river between steep banks; (vi) woman with baby on shoulder fleeing from long-bodied black beast (wolf?); (vii) man fleeing from long-bodied yellow beast (panther?). Scenes divided from each other informally by groups of hills fir-outlined. Men in long trousers, long-sleeved belted coats with skirts cut up in tails, and black-tailed caps or square black head-dresses; woman in curious garb of loose red trousers coming up under arms with girdle and straps over shoulders; bare arms and neck.

On either side below stand donors—man and woman in each case, with small boy also on R. Dress as of donors in *Ch. 00102; one woman's jacket ornamented with carefully painted red and yellow flower sprays, and both with patches on cheeks; boy in red tunic with pleated frill at bottom and long white trousers. Inscriptions consist of dedication, 10 ll. on panel between donors and four cartouches above chief donors' heads with inscription almost effaced; cf. Petrucci, Appendix *E*, II.

Painting of interest owing to markedly Indian character of Avalok. and his appurtenances, combined with Chinese style of remainder. Workmanship indifferent; colouring dark green, red, black, and opaque light yellow and blue on dark greenish background; the yellow and blue confined chiefly to Avalok.'s vesica and jewellery. Cf. for side-scenes, Ch. xl. 008; lvii. 001. 3′ 6″ × 2′.

Ch. xxi. 002. Silk painting representing *Śākyamuni between Bodhisattvas*, with donors. Considerably broken and worn; border of blue-green silk partially preserved on three sides. Upper part shows Śākyamuni between two Bodhisattvas, all three seated cross-legged on Padmāsanas facing spectator. No altar, trees, or canopies; but blank cartouche for inscr. on R. of each fig.'s halo, and spaces of background broken by pink and white lotus flowers with leaves; ground beneath Padmāsanas painted grey, with lozenge tiles outlined in white. Ś. holds alms-bowl in L. hand, and in pose, dress, and colouring resembles exactly Buddha of Ch. 00224, except that his flesh is shaded with dark pink instead of orange. Bodhisattvas also of corresponding type; their outer hands are in *vitarka-mudrā*; their inner hands concealed by the edge of Buddha's vesica.

This and three haloes are circular, edged with flame, and show remains of petal, vandyke, and waving ray ornamentation as in large Paradise pictures (see *Ch. lii. 003, etc.). Like petals of Padmāsanas they were painted in terra-cotta, dark pink, grey, black, and white; but material of this picture is soft plain-woven silk, not gauze; paint has accordingly caked more on surface and flaked off. Blue on lining of Buddha's mantle and on Bodhisattvas' stoles has in this way practically disappeared, and most of pink and white of latter's flesh. Drawing hasty, and workmanship generally rough.

Donors in dress, head-gear, and physical type same as in *Ch. 00102, etc. They sit cross-legged instead of kneeling, the man on L., his hands in adoration with lotus spray held between; woman on R., her hands muffled in sleeves before breast. Behind her stands boy in red skirt and long-sleeved jacket tied with a white girdle. His hair is black, cut close to the head; two red ears (apparently of ribbon bow) stand up on top of his head. Man's and woman's dress is painted entirely in black, white, grey, Indian red, and very dull olive-green. 1′ 10″ × 1′ 5″.

Ch. xxi. 003. Large triangular head-piece to silk painting, of cream silk damask, doubled, woven with large naturalistic floral design, of which fr. only appears. Border and suspension loop of fine plain silk, dark purple faded to brown. Tags of white and saffron silk attached to loop. Painted on each side with Buddha seated in meditation on lotus rising on straight stem. Angles filled with sprays branching from same plant, and detached flowers above. Oval halo and vesica; hands and feet invisible. Mantle covering both shoulders dark terra-cotta; under-robe light brown and white; flesh solid yellow. Lotus sprays and leaves light brown, flowers tipped with red; halo light brown, vesica in bands of dark brown, yellow, and light green. Buddha has slightly oblique eyes and oval face with youthful expression. See also Ch. 0086. H. 1′ 8″, base of triangle 3′.

Ch. xxi. 005. Linen painting representing *Six-armed and Eleven-headed Avalokiteśvara*, standing, with donors. Red linen border and suspension loops. Good condition. Fig., pose, emblems, and dress as in Ch. 00125 except for eleven heads; cf. also paintings enumerated under *Ch. 0052. Sun on R. hand; moon on L., showing only tree; no willow in middle hands. Colouring orange, yellow, green, and crimson. Donors, three men on R., three women on L., standing, in dress of donors of *Ch. 00102, etc. (With 3″ border) 4′ 10″ × 2′ 2″. Pl. LXXXIX.

Ch. xxi. 006. Painting on fine linen, with remains of brown silk border, showing *Thousand-armed Avalokiteśvara*, seated, with attendants and donors. Figs., accessories, and general treatment as in silk paintings descr. under *Ch. 00223. In R. and L. top corners appear resp. Bodhisattvas of Sun

and Moon seated within their red and white discs; but Bva. of Sun here seated on horses, and the Bva. of Moon on geese. Below kneel, on R. ascetic; on L. Nymph of Virtue; former, like the Nāgas upholding A.'s Padmāsana, having crest of serpent heads. Demonic Vajrapāṇis in lower corners, and along bottom row of donors on small scale. They consist of monk, three men, and two men-servants (standing) on R., and a corresponding feminine line on L. Their dress is that of donors in Ch. xx. 005; men's coats being chocolate, women's red or brown and yellow. Painting 3′ 5″ × 3′ 4″, border 3¼″. Pl. LXV.

Ch. xxi. 007. Linen painting showing *Avalokiteśvara*, standing. No border; linen suspension loops at top; torn, and paint entirely gone from lower quarter of picture. Fig., pose, dress, and emblems as in Ch. iii. 0011; cf. also linen paintings under *Ch. 0052. Face very large, with oblique cat-like eyes and crooked mouth. Remains of colour dark red, green, and grey. 5′ 2″ × 1′ 9½″.

Ch. xxi. 008. Linen painting showing *Avalokiteśvara*, standing. Lower end of painting destroyed, otherwise in good condition. No border. Fig., pose, dress, and emblems as in Ch. iii. 0011, and good example of the type; cf. also paintings under *Ch. 0052. In addition to usual jewellery a thick twisted rope of pearls, falling to knees. Colouring light red, olive-green, and black. 6′ × 1′ 8½″.

Ch. xxi. 009–10. Two painted linen banners; streamers lost; fair condition.

Subject: *Avalokiteśvara* (?), standing ¾ L., with hands in adoration. For descr. of type and other examples, see *Ch. i. 0016. Colouring only red and brown; bad drawing and workmanship. 3′ 2″ (with head-piece) × 6½″.

Ch. xxi. 0011. Painted linen banners, with head-piece border and side streamers of brown linen. Much torn at top; in subject and accessories replica of Ch. iii. 0016, q.v. 4′ 1″ (with head-piece) × 6¼″.

Ch. xxi. 0012. Large painted linen banner-top. Light buff, double, with border and loop of light red linen. Painted each side with Buddha seated in meditation on lotus; colouring red, blue, yellow, and green; fresh and in good condition. H. (with loop) 1′ 9″, base 1 yd.

Ch. xxi. 0013. Painted silk banner with four bottom streamers of light pinkish-brown silk; other accessories lost. Painting rather cracked, but clean and fresh.

Subject: *Kṣitigarbha* as monk. For other examples, see *Ch. i. 003. Stands slightly towards R. on pale-blue lotus; R. hand raised in *vitarka-mudrā*, L. carrying long-necked flask with metal foot and top, and globular porcelain (?) body of green and white. Dress consists, as in *Ch. i. 003, etc., of under-robe and large mantle, but without jewellery. Mantle is light red draped over L. arm and just covering R. shoulder; but R. arm is further covered by long corner of inner robe (yellow bordered with green or black) which is drawn out from below.

Head high and dome-shaped; face long and full, with straight nose, small mouth, and eyes set close together. Down on shaven head is painted blue; eyebrows green; inner aspects of hands, soles of feet, and whole of ears in red. Circular halo and tasselled canopy are of type seen in *Ch. 002, etc. About L. hip are traces of dark orange and blue paint, and signs of drawing of former fig.

Painting 2′ 2″ × 7¼″, length with streamers 4′.

Ch. xxi. 0014. Silk painting representing the *Eleven-headed and Six-armed Avalokiteśvara* (Kuan-yin), seated, with two kneeling monks (donors or attendants); see *Ch. 00102. Complete 4″ border preserved, of dark purple ribbed silk; most of lower half of painting lost; remainder in fair condition, but worn.

Dress, pose, and accessories of chief fig. generally as in *Ch. 00102. Upper hands, R. and L., hold up respectively discs of Sun and Moon; middle hands in *vitarka-mudrā* on either side of breast; lower hands on knees, R. as in *vara-mudrā*, but with thumb and first finger joined, L. holding flask. Sun-bird here stands on lotus and has only two legs, but is of usual phoenix type. On Moon are preserved figs. of tree, hare with mortar, and frog. Avalok.'s two heads in profile are of pacific aspect, and all eleven are of same complexion, white outlined and shaded with light red. Three large heads have also small moustaches and beards drawn in olive-green over black.

Colouring of dress is orange, Indian red, green, and grey; same colours with addition of dark pink used for Padmāsana, waving rays of halo, and vandyke, jewel, and petal decoration of vesica.

Scarlet and white lotuses are scattered in air. In bottom corner kneel two monks, shaven, unhaloed, and with hands in adoration. Their robes are brown, yellow, and red; their heads, drawn with light clean touch, form only individual feature in picture. Workmanship otherwise conventional and of mediocre quality. 2′ 7″ × 2′ 3″.

Ch. xxi. 0015. Paper painting with Chin. inscr., showing *Bhaiṣajya-buddha* seated between Avalokiteśvara (Kuan-yin) and Vajragarbha. Painting backed with another sheet of paper, orn. with square repeating rosettes; inter-lining of coarse linen. B. sits on pink-tipped Padmāsana; R. hand holding beggar's staff over shoulder; L. on knee holding rice-bowl. Under-robe green, mantle crimson barred and bordered with green, covering both shoulders and arms. Hair black, face brownish flesh-colour shaded with red; circular halo and vesica of variegated rings of colour; canopy on flowering tree above. Bodhisattvas of type *Ch. 002. Painting in broad style, lower half much obscured by dirt; colouring crimson, green, slate, and orange. Border of half-rosettes on orange ground down sides.

Cartouches with inscr. are placed on either side of Buddha's canopy, identifying Bodhisattva on R. as Kuan-yin, on L. as Vajragarbha; but the Buddha's name is nowhere given. 2′ 9″ × 2′ 6″.

Ch. xxii. 001. Painted silk banner, retaining three bottom streamers of sage-green silk, orn. with butterfly, bird, leaf, and cloud motifs in black paste. Upper end of painting lost. Surface somewhat destroyed, but colours fresh.

Subject: *Mañjuśrī* on white lion; the whole $\frac{3}{4}$ to L. For other examples see Ch. 0036. M. sits cross-legged on blue lotus, which is raised on pedestal on lion's back, hands clasped before breast and eyes looking down. Dress and features of type *Ch. 002; nose aquiline, eyes extremely oblique.

Lion same in general attitude, type, and colour as in Ch. 0036, but L. forefoot lifted; mane, beard, tail, etc., green. Colouring gay, comprising bright tomato-red (on M.'s skirt), purple and green (on stole), vivid crimson (on under-robe); slate-blue, purple, scarlet, and green (on lion's trappings and lotus underfoot).

Large circular halo of variegated rings behind M.'s fig., and smaller one behind head. Yellow cartouche for inscr. to L. of head, blank.

Painting 1′ $4\frac{3}{4}$″ × $5\frac{1}{8}$″, length with streamers 4′.

Ch. xxii. 001. a. Fr. of painted wooden panel (strip from centre) showing Buddha seated in meditation on lotus. Finished at top and bottom with bands of black and red. Rough work. On the cut-down sides are carelessly written Chin. inscriptions, illegible. 1′ $1\frac{5}{8}$″ × $2\frac{1}{4}$″ × $\frac{7}{16}$″.

Ch. xxii. 002. Silk painting representing *Six-armed Avalokiteśvara* (Kuan-yin), seated, with attendants and donors. Complete border of coarse grey lines with suspension loops preserved; painting badly broken and worn. Dress, pose, and accessories of chief fig. generally as in *Ch. 00102; lotus rising from small tank with altar in front. Upper hands hold up discs of Sun and Moon; Sun in L. hand containing three-legged bird, Moon in R. showing roughly drawn tree, hare and mortar, and frog. Middle hands in *vitarka-mudrā* on either side of breast; lower on knees, R. hand with fingers closed as though grasping rosary, L. hand in *bhūmisparśa-mudrā*.

A. has one head only, and wears Dhyāni-buddha on tiara. Attendants consist of Bodhisattvas only, kneeling one above the other, two a side, with hands in adoration, on lotuses which rise also on long stems from tank. They have no distinctive attributes; all, like Avalok., wear 'Indian' type of dress. Drawing hasty; colouring throughout of dress, haloes, vesicas, and lotuses restricted to dull crimson, dark green, and grey on greenish ground, with red-brown for altar-vessels and jewellery.

Lower end of painting contains central panel (blank) for dedicatory inscr. and donors—two women kneeling on L. and two men on R.—with narrow cartouche, also blank, before each. Two women and second man have same costumes and head-gear as in *Ch. 00102, and of same colours. Other man's dress seems to be of same fashion, but with colours reversed. On his head a tall mitre-shaped black cap with deep depression across middle of crown from side to side; details however are indistinguishable. Workmanship originally indifferent. 3′ 9″ × 2′ 4″.

Ch. xxii. 003. Painted silk banner with Chin. inscr. Complete except for weighting-board, but interior of head-piece has perished, and border, of faded pink silk, has been roughly sewn down on to cane stiffener. Streamers of discoloured dark green silk. Upper decorative end of painting much broken and repaired.

Subject: '*The Bodhisattva who joins the hands.*' Stands slightly to L. on dull pink lotus, hands at breast in adoration. In style, clumsy imitation of *Ch. 002 type; dress, coiffure, and jewels same, but fig. short and very stiff, tilted back in one straight line from feet to head, and drapery cumbrous, concealing instead of suggesting form. Jewellery simple, and set with disproportionately large round stones. Face ill-drawn with semicircular outline from R. eye to base of L. ear, almost straight eyes down-dropped, and very small pursed-up mouth set immediately under nose.

Colouring poor and muddy, consisting of slate-grey (on stole and border of skirt), thin pink (on skirt itself), olive green (on jewels and reverse of stole), and dull red (on streamers, edge of girdle, and drapery on breast). No canopy, but straight draped valance hung with bells above circular halo. Cartouche with inscr., yellow, on L. upper edge.

Painting 1′ 11″ × 7″, length of whole 5′ 5″.

Ch. xxii. 004. Painted silk banner; on light grey gauze of exceptionally open weave. Considerably broken and all accessories lost except head-piece, which is one with main part of banner. Head-piece has raw edges, and is painted on background of Indian red with slate-blue lotus supporting orange jewel (?), and surrounded by dark green leaves. Below are remains of orange valance with large rosette pattern, hanging from vandyked band of blue and green. There is no canopy.

Subject: *Mañjuśrī.* Stands facing spectator on single lotus, weight thrown on projecting L. hip, body aslant to R. shoulder, and head inclined again over L. R. hand carries sword over shoulder, L. is at breast in *vitarka-mudrā.* Fig. tall, with small hands and feet and disproportionately slim waist.

Dress a variation of the Bodhisattva dress seen in *Ch. 0088 and many of linen paintings. Plain tight over-fall or short skirt covers long skirt or under-robe almost to knees. Upper half of body nude except for narrow brown scarf crossing it from R. shoulder, and short orange draperies falling from behind shoulders to elbows. The long skirt is orange and red, of very light material gathered up in billowy masses about lower leg, and clearing feet; over-skirt Indian red, with plain blue border and stiff green frill; girdle draped over it, dark green and blue; stole festooned across forearms, deep dull blue spotted with white; jewels mostly dull green, blue and brown in pale yellow settings.

Face a large oval, with very oblique downcast eyes. Hair is done in high black cone on top, and frames forehead and ears, but does not appear below. Tiara three-leaved, but has red head-piece within circlet covering hair to base of top-knot, where other upstanding gold orns. appear. Flesh shaded pink on whitish grey of gauze; all outlines black. Halo circular, in narrow rings of dull blue, orange, Indian red, and green.

In style of work, features of face, and detail of much of orn., the banner is of 'Chinese Buddhist' style; but pose,

dress, coiffure, and three-leaved crown recall banners of 'Indian' type; see *Ch. lv. 004, *0014. Effect coarsened by open texture of gauze, which necessitates use of very thick paint. Predominant colours are strong orange and dull deep blue referred to above, which are repeated in lotus underfoot. For other representations (with lion), see Ch. 0036.

2′ 3″ (length with head-piece) × 7¼″.

Ch. xxii. 005–7. Misc. frs. of large silk paintings, including part of Paradise with musicians, dancer, Bodhisattva, canopy, and side-scenes showing Queen Vaidehī in meditation; feet and lower robes of large standing Bodhisattva; part of large standing Lokapāla (?), and fr. of hand. Halo of Thousand-armed Avalokiteśvara holding emblems. Style as in more complete pictures.

Gr. fr. 1′ 7″ × 9½″.

Ch. xxii. 008. Remains of painted silk banner, broken and much worn, showing three of the 'Simultaneous births'; only example of subject amongst paintings of Collection. Banner is one of series enumerated under Ch. 0039. Three pairs of animals remain: above, sheep suckling lamb; in middle, cow being milked by woman and licking head of its calf; at bottom, mare suckling foal (Kaṇṭhaka). Signs of another scene at top. The animals seen in profile, against background of grassy ground sprinkled with red-flowering plants; groups divided by miniature ranges of mountains in red, blue, and green. Sheep and horse and their young are white, horse and foal having red manes and tails; cow and calf red. Woman milking partly obliterated, but remains of blue skirt and green and red jacket. Drawing of considerable charm. 1′ 4″ × 7¾″. Pl. LXXVI.

Ch. xxii. 009. Remains of silk painting, representing *Paradise*, prob. of Amitābha. Largest fr. shows head and R. shoulder of central Buddha, with head of attendant at side and part of trees and Paradise buildings behind. Other fr. shows head of subsidiary Buddha and attendant Bodhisattva. General type as in *Ch. 0051, etc. Gr. fr. 8½″ × 10″.

Ch. xxii. 0010. Silk painting representing *Eleven-headed and Eight-armed Avalokiteśvara* (Kuan-yin), seated, with donors. Made of one breadth of silk, 1′ 10″ from selvedge to selvedge; border lost, broken at top and bottom, surface worn and colour much dimmed.

Dress, pose, and accessories of chief fig. generally as in *Ch. 00102; Padmāsana rises from small tank; no altar. Upper hands, L. and R., hold up resp. the emblems of Sun and Moon, former containing three-legged bird, latter only tree. Second pair of hands hold tridents; third pair at breast, prob. in *vitarka-mudrā*, but painting too worn to show; fourth pair on knees, R. hand hanging downwards with thumb and forefinger joined, L. holding rosary.

The eleven heads treated as in *Ch. 00102; Amitābha's at top yellow, small Bodhisattva heads white and red; large heads in profile pale blue and green resp. Avalok.'s flesh otherwise is deep pink shaded and outlined with red; his dress and jewels dark crimson and green; same colours with addition of some purplish pink and pale blue (much effaced) repeated on halo, vesica, Padmāsana, and canopy. Metal-work of orns. red-brown picked out with yellow and black as in *Ch. 0051, etc.; vesica edged with creeping flame.

Work well drawn and finished, but details now effaced. On each side a short (blank) cartouche for inscr., beneath which kneel donors, man on R. and woman on L. These two, much effaced, show same costumes and head-gear as in *Ch. 00102; beneath each stands small fig. of same sex and in corresponding dress. Hair of both the latter done in side-knot fashion with projecting tails descr. in Ch. 00224. 2′ 5″ × 1′ 10″.

Ch. xxii. 0015. Drawing on silk with Tib. inscr., forming *Buddhist magic diagram or charm.* Plan same as in *Ch. 00190, etc., but only inner square and parts of two outer squares remain. In centre, within many-petalled lotus, is seated fig. of Avalokiteśvara with worshipper. Avalok. 'Indian' in style, seated in attitude of 'royal ease' with R. hand hanging over raised R. knee, and L. hand on ground behind thigh holding long-stemmed lotus; head bent over R. shoulder; oval halo and vesica. Worshipper Chinese, as in silk paintings *Ch. 00102, etc., wearing wide-brimmed hat and belted coat, and carrying censer. Round lotus are six concentric rings of Tib. writing containing prayer; spandrels of inner square, Vajra-bordered, filled with flaming jewels floating on waters of *Sukhāvatī*, from which rise lotuses. Outer squares, so far as preserved, filled with seated Bodhisattvas interspersed with Buddhist emblems and lotuses. Among former are noteworthy: above, in inner of two rows, Bodhisattvas of Sun and Moon on their respective goose and horse Vāhanas; below, Bodhisattva with lute; on all four sides, so far as preserved, two Nāga divinities with vesicas of serpent heads. Tib. inscr. transl. by Dr. Barnett; see App. *K*.

Fair condition, torn; drawing refined in line. (As preserved) 1′ 9″ × 1′ 9″.

Ch. xxii. 0016. Remains of silk painting representing *Two-armed Avalokiteśvara* (Kuan-yin), seated, with attendant Bodhisattvas and donors. Painting much broken and in very bad condition. Border of coarse greenish-blue linen preserved complete with four suspension loops above and three below of green linen or silk.

Avalok. sits with legs interlocked on lotus behind altar; R. hand was at breast prob. in *vitarka-mudrā*, L. is on knee (pose uncertain). Dress and orns. apparently treated as in Ch. 00167, but most of fig. and head lost. Attendant Bodhisattvas kneel one above the other, two a side, upper pair with hands in adoration, lower offering lotus flowers on platters. Narrow cartouche (blank) for inscr. on each side of central fig. Below is usual panel for dedicatory inscr. (also blank), with two men donors kneeling on R. and two women (partially preserved) on L.; their costumes and head-gear same as in *Ch. 00102.

Work throughout was rough, and colouring (crimson, black, and olive-green) is now mostly lost. 2′ 3½″ × 1′ 9½″.

Ch. xxii. 0017. Fr. of painting on closely woven linen, representing *Avalokiteśvara* seated, with attendants. Of interest owing to purely 'Indian' style as in Ch. lv. 0024,

but in bad condition. Whole of lower half and R. side of painting lost, with L. hand and leg of central fig.; remainder broken; colour almost totally gone and drawing much effaced. Remains of brown silk damask border at top.

Avalok. sits on lotus slightly to L.; R. leg bent across with R. hand hanging in *vara-mudrā* over knee; L. leg unlocked and hanging across front of Padmāsana, L. hand evidently resting on latter behind thigh. Face short and rounded with straight eyes downcast; body and limbs long and thin; flesh orig. white; robes and jewellery evidently very scanty, traces only remaining of narrow loin-cloth, ribbon-like stole, and solid three-leaved gold tiara orn. with spikes.

Dhyāni-buddha appears as separate fig. of smaller size, seated in meditation on Padmāsana above. On either side of him in upper corner small seated Bodhisattvas, prob. Mahāsthāma (yellow) on R. and Avalokiteśvara (white) on L. Below, to L. of central Avalok. and in similar attitude, small four-armed Bodhisattva; of corresponding fig. on R. only fr. of vesica remains. All vesicas elliptical, and haloes of elongated horseshoe shape.

Colouring orig. in light washes of few simple colours (light red, blue, white, yellow, and green) with background apparently of greenish blue; absence of orn. or detail. Chief characteristic of picture is lack of composition; various figs. scattered over surface without any unifying grouping, and central fig. hardly predominating even in size.

Cf. Ch. xxii. 0023, and for central fig., Avaloks. enumerated under Ch. 00121. 2′ 8½″ × 3′.

Ch. xxii. 0019. Embroidered silk cover, of oblong tea-cosy shape; made of one long strip of silk doubled, joined along one edge and across ends and then roughly turned in at the closed corners. Material a glossy white silk damask, lined with plain white silk; both excellently woven and now discoloured to pale browny cream colour. The damask has its ground in small twill, and a large naturalistic floral design, difficult now to distinguish, in heavier twill running in same direction. Over whole is embroidered a bold design of trailing tendril-like stems, bearing narrow triple leaves and widespread multicoloured flowers and half-flowers. Between the sprays fly crested birds with large heads, short tails, and outspread wings. Whole part of larger design no longer recoverable.

Embroidery worked through both damask and lining, stems in crewel-stitch, flowers and leaves in satin-stitch. Stems in greenish indigo; leaves with greenish indigo at bases and midrib and remainder in true green, or *vice versa*. The flowers have outer circle of nine broad pointed petals, spread flat, an inner ray of small oblong petals, and a pyramidal mass of stamens assuming triple-petal form. Outer petals shaded from centre outwards in either: (i) orange, yellow, and white; (ii) red and yellow; (iii) brown and pink; (iv) yellow and orange; or (v) orange, brown, and yellow. Inner petals and centres and half-flowers worked in various combinations of same colours besides bright and dark blues. Whole floral design and inner divisions of flowers and leaves were outlined orig. in silver, by means of thick thread of white silk twist rolled with strips of silver paper (?) and couched with fine silk thread; but most of silver gone. Birds worked solid in gold thread applied in same way, and couched in close lines following outlines of different parts of body. Upper wings, beaks, and eyes alone worked in silk, resp. yellow and brown. Plentiful remains of gold.

Work very fine, and style characteristically Chinese of T'ang period. Sprays and leaf forms of the same type are not uncommon in silver-work of the Shōsōin; see, e.g., *Shōsōin Catalogue*, i. Pls. 13 and 24. The flying birds are too common there to need further reference.

Condition on the whole very good. Length 1′ 5″, H. 9″. Pl. CVI.

Ch. xxii. 0021. Painted silk banner; somewhat broken and all accessories lost, but colour fresh.

Subject: *Samantabhadra* on white elephant, but without attendant. For other examples, see Ch. xx. 001. S. sits cross-legged on purple lotus, R. hand open on knee with fingers bent, L. raised carrying long-stemmed purple lotus bud; whole in ¾ profile to L. Bodhisattva of type *Ch. 002 in dress and features; elephant small, round-bodied, and very short-legged as in Ch. xxvi. a. 004. Elephant as in Ch. xx. 001 with head turned back, but stands squarely on all four feet; colouring and harness also as in the above, but drawing less life-like. All six tusks visible.

Colouring of whole very gay, comprising scarlet sprinkled with white flowers and green leaves on S.'s skirt, purple and crimson on jewels, crimson and green on elephant's trappings, pale blue on halo, and slate, orange, and purple on lotuses underfoot. Crimson cartouche for inscr. to L. of head, blank.

1′ 3″ × 5⅜″.

Ch. xxii. 0023. Remains of large silk painting with Chin. inscr., representing a series of Buddhas and Bodhisattvas, the figs. hardly coloured and drawn in marked Gandhāra style. From inscriptions (much effaced and some wholly illegible) it appears that they represent statues as supposed to be worshipped in the artist's day at certain Indian shrines. L. portion fairly complete except at top and bottom, R. portion fragmentary. Judging from usual proportion of height to width in the paintings, and also from size of scattered frs. remaining of R. side, it is evident that large L. side portion represents about half orig. picture.

The chief characteristic of the picture, apart from its Gandhāra style of drawing, is its entire lack of unity in composition. The figs. are all of about the same size, ranged side by side and one above the other, with cartouches for inscr. (vertical, horizontal, or sometimes right-angled) scattered amongst them. It is obvious that there was no central predominant fig. or group of figs., and from the number and position of cartouches in the more or less complete L. half it is probable that there was no interrelation intended even between figs. placed beside each other; cf. above, pp. 877 sqq.

The figs. remaining are as follows:

On L. large portion, (i) in L. top corner, two *Buddhas* standing side by side on lotuses upon the same mat. Whole

of one above hem of robe, and face of other, destroyed, R. hand of latter in *vitarka-mudrā*. Then cartouche, inscr. effaced.

(ii) Remains of *Buddha* seated European fashion on throne, with monk attendant on either side. Hands and face lost. Then cartouche, inscr. effaced.

(iii) Fr. of scene showing ladder being hoisted (supporters lost), and two men standing under it with hands in adoration. They are bearded, with hair on their head done in top-knot at back or on top; one wears scarlet mantle reaching to knee; the other *dhōtī* or short trousers reaching to knee. Legs of both below knee, including feet, are bare.

Below, on L., comes (iv) a *Bodhisattva*, seated cross-legged on flat rock supported on the prone figs. of two princes, whose heads emerge in front, gargoyle-fashion. The Bva. has R. hand in *bhūmisparśa-mudrā*, L. open on crossed feet. Dress: a red skirt and red mantle covering L. shoulder and arm; elaborate crown formed by triple monster head (human in middle, boar-heads at side) from whose open jaws hang jewelled tassels; necklace, in which is set wide petal-edged collar of silk (?); chased gold belt, bracelets, ear-rings, and knee-cap orns. Circular vesica and halo of ogee shape. From inscr. above on R. fig. seems to represent a statue in the Kingdom of Magadha, which may be identified with the 'Vajrāsana of Mahā-bodhi'.

To R. beside this (v) a *Buddha*, standing, with R. hand raised in *abhaya-mudrā*, open; and L. hanging by side, thumb, first and fourth fingers extended. Mantle and robe are uncoloured; mantle draped equally over both shoulders and arms, while over it a necklace with elaborate chased orn. of conventional floral design. Head-dress unusual, consisting of plain, three-banded, brimless crown widening towards the top, from which a pink veil hangs behind back of fig. to ankles. Enveloping whole fig. is elliptical vesica filled with radiating busts of small standing Buddhas. For identification of fig. with Śākyamuni performing the 'Great Miracle of Śrāvastī', see above, p. 878. Sq. inscr. cartouche above, on R., inscr. effaced. To R. of this were remains of pointed halo belonging to seated fig. [but *not* to the seated fig. now mounted in this place].

Below, on L., come a narrow cartouche with remains of inscr. (illegible) and (vi) a *Buddha* (small scale) seated cross-legged on throne, the seat supported by two lions, the back by two rampant griffins, with deer-like bodies, birds' heads, and rudimentary featherless wings forming a spiral at attachment to shoulder. Overhead is umbrella hung with bells; two Bodhisattvas with fly-whisks look over back of throne. B. has hands in same *mudrā* as in Kha. i. C. 0097.

To R. of this (vii) a *Buddha* (small scale) in yellow robe, seated cross-legged on Padmāsana with hands folded. Circular halo and vesica in one, behind. Remains of standing Bodhisattva either side, one with lotus spray carrying seated Buddha. Right-angled cartouche on R. above; inscr. effaced.

Below these are two more small-scale groups: (viii) cartouche, inscr. effaced, and *Buddha* in yellow robe seated on mat supported by two lions; R. hand over knee (palm inwards), L. raised, open; and (ix) a narrow-waisted vessel, with a triple elephant-head rising from it, and within elephant-heads, a *child Buddha*. Scarlet lotuses also spring from side elephant-heads, and support small seated Buddhas on the vessel's brim. The vessel stands on a stepped plinth, and small human figs. clamber about it, or kneel on plinth with hands in adoration. No cartouche.

To R. of last four groups is a fig. again of normal size: (x) a *Bodhisattva*, seated cross-legged on dragon-throne with fingers interlaced on lap, and thumbs joined at tips. Dress: long skirt or *dhōtī*; mantle over R. shoulder; armlet; bracelets; and elaborate necklace with heavy orn. on breast showing two dragon-heads in profile on either side of a pair of Buddha (?) busts—the whole orn. hanging from two bear-masks which adorn necklace at collar bones. Head-dress destroyed except for small fig. of bear, apparently forming part of R. ear-ring. Circular halo with miniature shrine at top; and border of flames, interspersed with small kneeling Bodhisattvas with lute, drum, etc., flying inwards round it.

To R. again: (xi) a *Buddha* standing on lotus; uncoloured mantle over both shoulders; L. arm lost; R. arm held out sideways, hand open; fingers slightly curved. Circular halo, and oval vesica with ogee top enclosing group of small Buddha seated on lotus with R. hand raised; standing Bodhisattva on either side, and gazelle kneeling in L. corner. Gazelle in R. lost. Prob. image representing First Sermon. Cartouche above, on L., inscr. effaced.

Below again, much broken, on L.: (xii) *Avalokiteśvara* standing, lotus in R. hand, flask in L., third eye in centre of forehead, dress and jewels of 'Indian' Bodhisattva with standing Dhyāni-buddha on front of tiara. Circular halo and oblong vesica with rounded corners. On either side background of rocks (fragmentary), in nooks of which are small seated Buddhas with worshippers. Immediately to L. of Avalok., one above the other, a Garuḍa with lute; a white lion lying down; and three worshippers with yellow flesh and hair dressed in plain cone, unhaloed, seated with hands in adoration. Traces of corresponding figs. immediately on R. Above are three bears, and in front of them two Apsaras holding a crown over Avalok.

[In broken space to R., as frs. are now mounted, appear two cartouches, one blank, one with Chin. inscr. (4 ll. incomplete), but neither belongs here. When painting was first opened at British Museum, the inscr. cartouche still formed part of the detached fr. on which fig. xvi appears; and the other, part of fr. containing figs. xiv and xv. See below, and enlargement of Inventory photograph No. 1611.]

On R. again appears (xiii) a standing fig. of *Śākyamuni in grotto of Vulture Peak.* Attitude and dress exactly as in embroidery Ch. 00260, and painting fr. Ch. 0059,—with R. arm and shoulder bare, R. arm hanging straight down with open palm and fingers extended downwards, L. hand gathering up 'ear' of drapery at breast; cf. above, pp. 878 sq., 895. Treatment of drapery also extraordinarily similar. Circular halo, and oval vesica (almost straight-sided)

with small seated Buddha on field over Ś.'s R. shoulder. Flame-border to vesica and black rocks behind. General background of speckled rocks as behind fig. xii, but mostly lost; shows however small Buddha practising Austerities (?) with worshipper.

Below traces of another row of figs. now destroyed.

There remain besides only detached frs., the four most important showing:

a. (xiv) L. side of a *Buddha* seated European fashion on altar-like throne; L. hand evidently at breast, but lost along with head and R. half of fig. Circular halo and upper half of fig. filled with radiating small Buddha busts as in fig. v. Border of flying Apsaras and flame. On R. (xv) standing *Buddha* in chocolate-brown robe with chocolate hands and feet. Head lost; R. hand held out sideways horizontally with palm up and fingers slightly curved; L. held slightly out and downwards with palm out and third finger only bent up. [Between haloes of these two figs., and forming part of same fr., was the blank cartouche referred to above.]

b. (xvi) *Bodhisattva* seated cross-legged like Buddha on low platform, and clad in Buddha-like red robe leaving only upturned feet, L. hand, R. breast and arm bare. R. hand in *bhūmisparśa-mudrā*, L. open in lap. No ear-rings, chains, or bracelets; but broad armlet on R. upper arm, necklace with wide petal-edged collar as in fig. iv, and high crown of which only canopy-like top is preserved. Circular halo and vesica, flame-edged, the latter showing white crescent on field either side of Bodhisattva head. On L. upper edge of this fr. as orig. found appeared the cartouche with 4 ll. inscr. referred to above, and the feet and legs of two men in coats and top-boots (Central-Asian type) standing by corner of Padmāsana to R.

c. (xvii) L. shoulder, arm, and side of head of *Bodhisattva* seated, with part of circular halo and vesica orn. with two rows of small seated Buddhas. Remains of red skirt or girdle, purple stole, armlet, necklace, leafy garlands, and tiara with white veil hanging behind shoulders, preserved. To R. (xviii) *Buddha*, standing, in red robe leaving R. breast and arm bare; circular purple halo behind head; L. arm held down by side, with hand held slightly outwards; palm down and fingers open. R. arm raised above head, and hand held outwards as in Avalokiteśvara's figs. (see *Ch. 00102, *00223, etc.) supporting red disc of Sun containing bird, two-legged, of phoenix type. Narrow cartouche on R., blank or inscr. effaced.

d. Another fr. prob. belonging to this painting shows a large panel (1′ 9″ × 1′ 1″) for inscr., painted red-brown and ruled for 13 columns of Chin., but blank. Incomplete on R. side; on L. shows outside panel headless shoulders of fig. (woman donor ?) in crimson jacket with hands muffled in sleeves on breast.

L. half (figs. i to xiii) as first mounted at Brit. Mus. 6′ 8″ × 3′ 7″. Pl. LXX; *Thousand Buddhas*, Pl. XIV.

Ch. xxii. 0024. Two frs. of painted silk banner (all accessories lost), showing head, shoulders, and draperies at waist of *Bodhisattva* of type *Ch. 002. Fig. ¾ L., apparently standing, R. hand lightly laid on breast, L. in *vitarka-mudrā*. Face very finely drawn, small and rounded; modelling delicately shaded with pink. Eyes small and slanting; line of upper eyelid of L. eye prolonged in fine curve far beyond corner of eye and sweeping up slightly again at end; ears elongated and pierced, without rings. Colouring bright but harmonious and well preserved. Stole, slate and olive on reverse sides; streamers and drapery across breast, bright crimson; lotus buds and tassels of tiara, purple and red; halo, blue with outer rings of red, yellow, green, and crimson, and border of natural light brown and blue. Work skilful and refined throughout. 6″ × 5″, and $2\frac{1}{2}$″ × $6\frac{1}{4}$″.

Ch. xxii. 0025. Fr. of silk painting showing upper part of *Eleven-headed Avalokiteśvara*, 'Indian' style, almost effaced. Uncertain whether seated or standing; but fr. extant would take to somewhat below waist of fig. if standing, and almost whole if seated with legs drawn up. Fig. appears to be two-armed only, with L. hand at breast. Part best preserved is head, with narrow straight-sided oval halo, and similar vesica flame-edged. Ten minor heads all piled on top of main one, and appear all to be Buddha heads, with *uṣṇīṣa*, and no orns. on hair. But absence of orn. is perhaps due to lack of detail in drawing.

Drawing much effaced, and paint completely gone except for traces of orange on halo, and crimson on flame-border of vesica and parts of robe. Lotus with conventional scrolled foliage appears to grow up either side. Cf. Ch. 00121, etc. Gr. M. *c.* 2′ × 1′ 8″.

Ch. xxii. 0026. Part of illustrated Chin. MS. book, beginning with representations of the Four *Lokapālas*; cf. Ch. xviii. 002. Ten leaves remain. First shows on outside remains of purple and green silk, and formed cover; inside, painted figs. of two Lokapālas standing. Second has on obv. one l. Chin., on rev. two remaining Lokapālas. Third shows on obv. 4 ll. Chin. in black and one isolated char. in red; on rev. 9 ll. text with gloss. Remaining leaves contain continuation of text, well written in black with red punctuation, 8–9 ll. on each side of page, text consisting of passages from various Sūtras.

As in Ch. xviii. 002, the paintings are accompanied by inscr., but these do not contain the accepted Lokapāla names, and their significance is not as yet certain.

Kings are without attendants, unhaloed, and stand on flat rocks or islands, each pair facing each other. Their armour same as in Ch. xviii. 002, but drawn in less detail; their legs below knee are swathed in red and yellow bands like puttees. Pink cloud rises from hand of each; colouring otherwise consists of red, green, yellow, and grey. In detail figs. run as follows in order from R. to L.:—

(i) Lokapāla with R. hand clenched at breast, L. hand holding pole-axe; *Virūdhaka*. (ii) Lokapāla with bow and arrow; *Dhṛtarāṣṭra*. Inscr. mostly lost. (iii) Lokapāla with R. hand raised, palm up, empty; halberd in L. hand; *Vaiśravaṇa*. (iv) Lokapāla with sword in R. hand, L. hand on hip; *Virūpākṣa*.

Size of leaf $5\frac{1}{4}$″ × $5\frac{3}{4}$″. Pl. XCII.

Ch. xxii. 0030. Large silk painting with Chinese

inscription, representing *Avalokiteśvara* (Kuan-yin), standing, without attendants. Upper $\frac{3}{4}$ of fig. preserved, but almost whole of remainder lost. Part preserved in good condition, and characteristic example of elaborate 'Chinese' Bodhisattva.

Fig. stands $\frac{3}{4}$ R., R. hand raised holding willow spray over shoulder, L. at waist carrying flask. The Dhyāni-buddha is represented standing on front of tiara, with hands in *abhaya-* and *vara-mudrā*. Dress, ornaments, and physical features of *Ch. 002 type; workmanship very skilful and refined. Stole of fine dull blue forms chief note of colour in picture; under-robe of pale olive-green, rising only to breasts and held up over L. shoulder by band of pale pink; jewellery elaborate and plentifully strung with pale pink stones. Fig. particularly soft and full; face of normal 'Chinese Buddhist' type with low forehead, full cheeks, small mouth and chin, and oblique prominent eyes gazing downward and three-fourths covered by heavy lids. Small moustache and beard shown by wavy brush-lines on lip and chin. Hair black; flesh left the original greenish brown of silk, but shaded with light red. Red-flowering branches, prob. originally intended to represent lotus, grow up R. side of picture. Fig. evidently intended to be walking, as tasselled canopy above halo is in violent agitation.

Inscription on cartouche on R. edge contains only salutation to Kuan-yin. Cf. for other standing figs. of Avalok., unaccompanied, *Ch. 0088; above, p. 867. 3′ 7″ × 1′ 8½″. *Thousand Buddhas*, Pl. XIX.

Ch. xxii. 0032. Painted paper banner, showing *Bodhisattva*. From same series as Ch. xx. 0015, and same rough style of work; but Bodhisattva's dress and physical type copied from 'Chinese Buddhist' type of *Ch. 002. Stands facing spectator, head $\frac{3}{4}$ L., hands in adoration. Colouring dull red, yellow, olive-green, slate, and brown. Painting 1′ 5″ × 6¾″; length of whole 3′ 5″.

Ch. xxii. 0033. Paper painting, belonging to series Ch. 00162, etc., and showing divinity unhaloed, riding on peacock. Fig. like that of above mentioned, except that it wears Bodhisattva dress of 'Indian' style. In R. hand it carries flaming jewel, in L. cock. Style coarse but effective, with heavy brush-lines, and simple colouring of terra-cotta, bluish green, and slate-blue. Blank cartouche for inscr. in L. upper corner. 1′ 6¼″ × 1′ 0½″.

Ch. xxii. 0034. Paper painting from same series as Ch. 00162, etc., showing *Vaiśravaṇa*. Seated on low couch or sitting platform with L. leg bent across, and R. leg hanging. L. hand holds halberd, R. miniature shrine. Dress and armour as in companion picture Ch. xvii. 003, except that V. wears three-leaved crown upon his head and corslet over his coat of mail. The latter is painted on body and arms in horizontal stripes of yellow and grey, but without scales. Beneath it a red skirt covers legs. Colouring and style of work as in others of series; condition good. 1′ 6½″ × 1′ 0½″.

Ch. xxii. 0035. Lower half of painted silk banner, with frs. of streamers of dark brown silk.

Subject: *Scenes from the Life of Buddha*; two preserved. Belongs to series Ch. 0039, q.v. for description of style, colouring, etc.

Scene 1. *Buddha's Bath in Lumbinī Garden*. B. stands in an oblong basin raised on lotus pedestal, while stream of water falls on his head from white and slate-coloured thunder-cloud above. On either side kneel Māyā and Prajāpatī with hands clasped in adoration.

Scene 2. *The Seven Steps*. Buddha stands in middle of large pink and white lotus, R. arm stretched up and finger pointing to heaven, L. pendent. Three other lotuses lie round, and flowers float in the air. On R. kneel Māyā and Prajāpatī; and on L. a man in red coat and black-tailed cap.

In both scenes Buddha has black hair and fig. of a grown man, and wears a red *dhotī*. Women's dress and orns. as in Ch. 0039. Work very rough. Blank cartouche for inscr. by side of each scene.

For other representation of both scenes, see Ch. 00114; for the Seven Steps, Ch. lv. 0010. 1′ × 7⅜″.

Ch. xxii. 0036. Frs. of printed silk, plain weave, thin, much decayed. Pattern: rows (repeated diagonally) of six-petalled circular rosettes with flat spreading leaf springing from behind each petal. In spandrels small six-petalled rosettes, with triple forked leaf springing from alternate petals. Ground and inner circle of petals in large rosettes, indigo; other petals, red or pink; leaves green; trefoils yellow (?). Faded. Gr. M. *c.* 1′ 6″ × 10″.

Ch. xxiii. 001. Painted silk banner, fragmentary, on light grey silk gauze of very open texture.

Subject: *Virūpākṣa, Guardian of the West*; a replica of Ch. xxxiv. 004. R. arm here preserved, with hand raised prob. supporting some emblem on finger-tips; also back of head showing part of tiara.

As in other paintings on this coarse gauze (e.g. Ch. xxii. 004), colouring and outlines are lost to a great extent; but predominant hues were light blue and orange as in the above, flesh being light pink, and straps, mantle, etc., black. Remains above, backed with paper, of painted valance, with vandyked hanging and rosette-orn. band in dark blue, green, crimson, and orange.

Main portion 1′ 8½″ × 7″.

Ch. xxiii. 002–4. Three painted linen banners, retaining head-pieces and (002) side streamers; other accessories lost; 003 ragged and incomplete at edges and bottom.

Subject: *Avalokiteśvara*, standing with hands in adoration; *002* $\frac{3}{4}$ R., *003* facing spectator, *004* $\frac{3}{4}$ L. For descr. of type and list of similar banners, see *Ch. i. 0016. Bad drawing and workmanship, especially 004. 002 has Chin. inscr. containing salutation to Kuan-yin. (With head-pieces) 3′ 5″ × 6½″, 3′ 9″ × 9½″, 3′ 1½″ × 8″.

Ch. xxiii. 006. Painted linen banner, with head-piece border and remains of streamers of light buff linen. Fair condition, but colour faded. Companion painting to Ch. 00140.

Subject: *Bodhisattva*, standing facing spectator; R. hand raised to shoulder and turned backwards, thumb and first

finger joined; L. hand in *vitarka-mudrā* at breast. General type of fig., dress, and coiffure as in *Ch. i. 0016; but fig. on smaller scale and workmanship neater than usual. Halo orn. with vandyked rays; no canopy; vandyked and flower-orn. valance above. Colouring dull red and light grey. 4′ (length of whole) × 6½″.

Ch. xxiii. 007. Painted linen banner with head-piece border and side streamers of brown linen. Fair condition. Practically replica of Ch. 00139 (q.v.), but L. hand of Bodhisattva drops sharply from wrist, and colouring includes bright orange. 4′ 3½″ (with head-piece) × 7″.

Ch. xxiv. 001. Painted silk banner; all accessories lost, otherwise in good condition.

Subject: *Dharmapāla Vajrapāṇi*, a fine example of developed 'Chinese' demon type; see Ch. 004. Stands facing spectator in pose of violent anger, head and shoulders leaning forward, and head turned R. gazing down with concentrated fury on victim out of sight to R. R. arm with open hand raised threateningly above head; L. by side grasping Vajra. Body and limbs of thick muscular type as in Ch. 004, etc., but effect here emphasized by thickness of brush-lines used for all fig. outlines. Joints and muscles much conventionalized, but general result full of vigour. Modelling represented in same conventional fashion as in Ch. xxvi. a. 005; but here unobtrusive owing to use of dim brown only on grey of silk.

Dress: a *dhōtī* of rich red with black and blue border and plum-coloured lining; wide stole of olive-green with reverse of shaded blue; white girdle with plum-coloured edge; red and yellow streamers; brightly jewelled necklace, chain, tiara, etc. Large green halo with flames creeping round edge and bursting out round uplifted arm. Top of panel filled in with coiling cloud, red, green, and blue, and lotuses outlined blue and red under feet. Colours strong and clear, heightening violent effect consistent with character of god.

For another in same style, see Ch. xxiv. 002.

2′ 10″ × 10″.

Ch. xxiv. 002. Painted silk banner, retaining bottom streamers of soft grey silk damask woven in lattice-work pattern. Other accessories lost and painting considerably broken.

Subject: *Dharmapāla Vajrapāṇi.* Identical in style and technique with Ch. xxiv. 001, and pose the same except in details; e.g. R. hand is clenched, L. hand turned outwards, Vajra shortened through lack of space, and mouth wide open roaring. Modelling indicated in pink instead of grey, and lips and tongue bright crimson. Colouring of dress as in the preceding.

For other Vajrapāṇis, see under Ch. 004.

Painting 2′ 7″ × 10″, length with streamers 6′ 10″. Pl. LXXXVI.

Ch. xxiv. 002. a. Painted silk banner, retaining head-piece and one bottom streamer of thin brown silk, much decayed. Painted centre of head-piece has perished, and hole is patched with brown gauze. Banner proper is also made of gauze of exceptionally dark brown. Painting is much faded but almost intact.

Subject: prob. *Avalokiteśvara* (Kuan-yin). Stands ¾ L. on lotus outlined red; R. hand holding up bud of scarlet lotus, L. in *vitarka-mudrā*; small Stūpa painted on central orn. of tiara. Fig., dress, accessories, and style of work are of type *Ch. 002. Drawing delicate and carefully finished. Face has peaceful expression; eyes very small and slightly oblique; nose straight and blunt; ears normal and without rings; mouth small, bright red, and slightly parted; plentiful traces of red remain on cheeks.

Colouring much lost, but what remains tones well with warm brown of background; consisting chiefly of pinkish purple, orange, and crimson. All colours gone from halo and person; also from stole except for streaks of bright blue and green. Canopy swings as if in wind. Painting 2′ 3½″ × 6⅞″, length of whole 5′ 5″.

Ch. xxiv. 003. Painted silk banner; all accessories lost. Gauze of exceptionally dark brown; painting in fair condition but discoloured.

Subject: prob. *Avalokiteśvara* (Kuan-yin). In pose, colouring, physical type, and style of work similar to Ch. xxiv. 002. a, but not from same orig. R. hand, as before, holds scarlet lotus bud, but L. hand is placed horizontally before breast. In front of tiara is lotus bud (white?) instead of Stūpa.

Colours darker in tone (or more discoloured), and differently distributed. Skirt originally white or uncoloured, with folds drawn in bright crimson and border of light blue; stole dark purple lined with bright green; jewels, tassels. etc., crimson, white, and dark purple; but colour throughout much dimmed and absorbed into brown of background. 2′ 2″ × 7⅛″.

Ch. xxiv. 004. Painted silk banner with four bottom streamers of greyish-green silk. Other accessories lost, but painting in good condition and colours fresh.

Subject: *Kṣitigarbha* as monk. For other examples see *Ch. i. 003. Stands ¾ L. on single lotuses yellow and white; R. hand raised carrying flaming jewel, L. horizontal with palm on breast, thumb, second and third fingers joined. Dress consists of mantle and under-robe; under-robe (green with brown border) clearing ankles, mantle (scarlet lined with pale blue) wrapped over L. shoulder and arm; R. arm and breast bare. Jewellery comprises necklace, bracelets, and ear-rings.

Head long and narrow, with eyes close-set and only slightly oblique. Shaven head painted grey; chin and eye-brows olive-green; inside of ears and fingers and soles of feet outlined red. Halo and canopy, and style of work generally, as in *Ch. 002.

Painting 2′ 11″ × 10⅝″, length with streamers 7′ 6″.

Ch. xxiv. 005. Painted silk banner; all accessories lost, but in good condition.

Subject: *Buddha, prob. Amitābha,* with flaming jewel. Stands facing spectator on two lotuses, respectively dark pink and bright red; R. hand raised in *vitarka-mudrā*, L. also at breast, carrying flaming jewel on palm. Dress:

the monk's under-robe and mantle; former yellow-green bordered with black and lined with white; latter bright red lined with slate-colour. Under-robe descends to feet and covers R. shoulder and arm. Mantle covers L. shoulder and arm, passes under R. arm, is draped in conventional folds across front of fig. falling to below knees, and caught up to L. shoulder again by a tasselled cord. Face a full smooth oval of conventional Buddha type with *uṣṇīṣa, ūrṇā*, elongated ears, and eyes very slightly oblique gazing under half-closed lids. Hair and *uṣṇīṣa* are painted a flat black; flesh of face and neck a very pale transparent yellow shaded with glowing apricot, while ground colour of hands and feet is paler, and shading pinker. Halo, canopy, and other accessories of same type as in Bodhisattva banners of type *Ch. 002, and method of shading flesh and drapery the same. Yellow cartouche for inscr., blank, to L. of head.

Workmanship finished, but inanimate.

2′ 4″ × 7¼″. Pl. LXXXIII.

Ch. xxiv. 006. Painted silk banner; all accessories lost, but painting in excellent condition.

Subject: *Bodhisattva*. Stands ¾ R. on blue lotus with hands in adoration. Fig., dress, accessories, and style of work of type *Ch. 002; but skirt gathered up in front showing bare legs. Ears of all but normal length, pierced but without rings. Inside of ears, edge of palms of hands, and soles of feet outlined red. Colouring chiefly crimson, green, a blue approaching indigo, and light pink, all in fresh condition; workmanship faultless within stereotyped conventions of type. 2′ × 7¼″. Pl. LXXVIII.

Ch. xxiv. 008. Dated roll of narrow hanging of whitish silk covered with painted Bodhisattvas; Chin. inscr. at top and by each fig. In tatters, and lower end lost, but clean.

Roll made of single width of thin glazed silk (selvedge to selvedge 1′ 11″). To top is sewn a similar width of yellow silk, poor quality, unevenly dyed, incomplete at upper end, but showing lower ends of 18 ll. Chin. dedicatory inscr., containing date A. D. 956.

Upper end of roll shows two canopies side by side, but below this it was slit down middle, and inner edges finished off by fine seams. A series of standing Bodhisattvas was then painted down each strip, figs. standing one below other, and each occupying, with canopy and Padmāsana, *c.* 2′ 10″ to 3′ 1″. Remains of four continuous figs. are preserved on R. side, and four to five (broken) on L. Figs. outlined and painted entirely in light red, with faint light blue on hair, occasional blue and green on jewels, pale yellow on jewellery, and black only on pupils of eyes, line of eyebrows, and dividing lips, and bead necklace. Inscr. also are in black or pale yellow cartouches by each fig. and contain epithets of Bodhisattvas.

Figs. face spectator, except one (feet only preserved) who stands in profile to R., and their hands are in adoration or other mystic poses. One carries rosary (painted black). For frs. of similar rolls, see Ch. 00474–80. Length *c.* 13′ (incomplete), width (both strips) 1′ 11″.

Ch. xxiv. 009. Silk streamer from valance, pointed at one end, edges turned in and sewn with red silk. Material, strong silk gauze of twined weave akin to Ch. 00332. Block-printed with bright salmon ground and floral pattern in yellow, on natural-coloured silk; pattern afterwards outlined with pen or brush in black. It consists of circular spots, about 8″ in diam., composed of mallow-shaped flowers and small leaves. These are arranged in vertical and horizontal rows about 4″ apart; intervening large spaces occupied by smaller spots surrounded by blunt-angled squares of cloud-scrolls and flying birds, placed diagonally, with smaller flower spots opposite angles. Leaf and flower forms as in printed carpet, *Shōsōin Catalogue*, ii. Pl. 102. Work rough but effective. 1′ 1″ × 4¼″. Pl. CXIII.

Ch. xxv. 001. Painted silk banner, with head-piece; all other accessories lost, and lower end of painting. Remainder cracked and worn. Head-piece of silk gauze coarsely painted with half-rosette and sprays in dull green, blue, black, and orange-red, outlined with red; border of fine grey silk. Orig. gauze broken and patched with fr. from another painting showing part of Chin. inscr.

Subject: *Scenes from the Life of Buddha*; three, Chin. in style.

Banner has side-borders, painted buff, with rosettes in profile, alternately green and black with pink calyxes, and light and dark blue with orange calyxes, and outlined in orange. It is divided transversely by three wider bands into small panels containing the scenes. Two of these show part of large rosette pattern corresponding to that of the head-piece, while the third has a waved band of same colours with half-rosettes in pink and orange filling hollows.

Scene 1. Unidentified. On R. sits Buddha (?), on a stool or basket-work seat, his hands raised as if in blessing. He wears crimson robe, covering both shoulders and arms; its exact shape indistinguishable; he is without halo, and his hair is in top-knot forming three upright points on top of head. Beside him stands attendant in orange belted coat, and black boots, his hair done in same fashion, and his hands in adoration. Before them kneel two men in similar coats and black-tailed caps. L. side and back of scene filled with a sq. building and courtyard wall in Chinese style; in foreground are trees, a grassy hill, and rocks.

Scene 2. Unidentified. Buddha (?) is again seen seated with hands upraised; but this time under tree in courtyard, surrounded by verandahed buildings and a high wall with gate tower as in Ch. lv. 009, 0016, etc. His hair and dress same as in (1), except that robe is here obviously wide-sleeved Chin. coat, and is bordered with slate-blue. His attendant also same, but carries a long-handled fan (?). Two boys stand before them; their R. hands raised to shoulder or chin; their L. arms held forward from elbow; their heads inclined over R. shoulder. They are naked except for white *dhōtīs*, and have short black hair undressed.

Scene 3. Unidentified. Also within a courtyard, but foreground missing. On R. under verandah sits same crimson-coated fig. as in preceding scene, his hand raised again as if

in blessing; before him kneel five figs. in belted coats, yellow, crimson, or green, and black-tailed caps, their hands held up by their sides or joined as in adoration. Behind them a verandahed building flanked by trees and a projecting corner of courtyard wall. Dress, buildings, coiffures, and floral decoration are entirely Chinese as in Ch. lv. 009, etc.; workmanship exceedingly rough. Outlines of buildings painted direct in red lines over tracing, and drawing of figs. is perfunctory. Colouring consists only of dull tones of crimson, slate-blue, light green, and red, yellow, and orange. Walls of pavilions and gateway white, courtyard walls yellowish brown. A double cartouche (blank) in orange-red on side of each scene.

Scenes not represented elsewhere in paintings. For unidentified scenes in same style of workmanship and perhaps of same series, see Ch. lv. 0021, 0022.

Painting 1′ 7½″ × 6¾″, length with head-piece 2′ 0¼″.

Ch. xxvi. 001. Large silk painting representing *Six-armed Avalokiteśvara*, seated, with attendants. Fine composition, but surface badly damaged; lower end destroyed by fire, R. edge lost, and several large holes where (dark) green paint has corroded silk.

Fig. sits on large white Padmāsana in attitude of 'royal ease'; R. knee raised, supporting elbow of upper R. arm, head inclined over R. shoulder. Body of slim-waisted 'Indian' type as in Ch. 00121; upper hands raised towards head, R. defaced, L. with thumb, second and third fingers joined; middle hands, R. before breast in *vitarka-mudrā*, L. below with palm up, fingers as in upper hands; lower hands, R. hanging downwards with fingers as in upper hands, L. resting on back on ground, thumb and first finger joined. No emblem except Dhyāni-buddha on front of tiara, which appears as high solid cone of chased bronze.

Garments those of 'Indian' Bodhisattva (see *Ch. lv. 0014) with flower-orn. caps over knees, and jewellery painted light green. Circular vesica of vandyke ray and flower pattern, and circular halo of waving rays; free edges of the two outlined by one continuous border of conventional flame, making three-lobed frame to fig. Outside flame-border again is broad band of white defined at outer edge by string of small lotus flowers set in bronze beads and seen in profile. This band encloses whole fig. from tips of Padmāsana in circle of light. Outside is canopy, and in four corners four small seated Bodhisattvas; two lower all but destroyed, two upper seated on lotus flowers which grow on twining stems from ground below.

Colouring chiefly white, dark red and light pinkish red, dark green and light green, on brown background; with blue on edges of robes only, and (on Avalok.'s flesh) yellow outlined and shaded with lighter red; but all colours much gone, and yellow and white almost rubbed off. Drawing refined and by sure hand; picture orig. of first class. Cf. for other single Avaloks. seated in this and other attitudes, under Ch. 00121. 3′ 6½″ × 2′ 5″. *Thousand Buddhas*, Pl. XXIII.

Ch. xxvi. 002. Embroidered silk head-piece to banner. A triangular panel of cream silk damask with border of thick silk gauze of dark plum colour, like Ch. 00332 in weave, but with more ribbed effect. Orig. suspension loop of figured silk, extremely faded but showing spot pattern same as that of Ch. 00432 on green (?) ground, worn out and replaced by loop of scarlet figured silk resembling Ch. 00177. b. This also worn to shreds. One orig. side streamer of dull myrtle-green silk-gauze with inwoven rosette pattern preserved, but faced with new streamer of dark blue plain silk, stitched to it with yellow silk. Small ornamental silk tassels, green and pink, attached to edge of border and of orig. suspension loop.

Triangular panel covered with fine embroidery in Chinese style, obscuring pattern of damask, which however seems to be of naturalistic floral type. Embroidery design consists of six-petalled blossom in middle, with tubular centre from which palmette-shaped blossoms and leaves rise to fill apex of panel, while other flowers and leaves spread to corners.

Worked in true satin-stitch in silks of three shades each of scarlet, green, and blue, also in dull brown, white, and light yellow. Colouring brilliant, harmonious, and well distributed so as to link main features of design. Stitching very fine and beautifully executed, back of embroidery presenting as perfect a surface as front. Below central flower, in place of leaf traced but not worked in, group of Chin. chars. roughly sewn in dark brown and illegible. Panel outlined with band of long-stitch, and chevron band below. From careful repairing evidently a prized piece of work. H. 9″, base of triangle 1′ 6″. Pl. CXI.

Ch. xxvi. 003. Torn strip of silk embroidery, showing part of naturalistic floral design on thin pink silk faded to pale buff. At bottom, remains of deer's head and horns. In making, the silk ground was faced with coarser pink silk gauze, and embroidery worked solid in satin-stitch through both, the gauze being then cut away round all outlines of design. Traces remain about tendrils and leaves not entirely filled in. By this method the embroidery was more easily done, and the finished work gained in solidity and relief. Stitching beautifully carried out in shaded greens, blues, terra-cottas, greys, mauve, and white. To end and back are roughly sewn fr. of dull terra-cotta lozenge-diapered silk damask, irregularly woven, and strip of plain red calendered silk. To latter remain attached shreds of apricot-coloured silk damask stamped with part of some large design. 11″ × 3¼″. Pl. CVI.

Ch. xxvi. a. 001. Painted silk banner; fragmentary, accessories lost except four bottom streamers of dark olive-green silk damask, glazed. Damask pattern a hexagonal diaper, carried out in double line which is broken at each corner of hexagon by three-membered star. Each hexagon contains lozenge-shaped rosette.

Subject: *Virūdhaka, Guardian of the South.* Fig., exaggeratedly tall and slight, stands facing spectator on head and shoulder of crouching demon; R. hand carrying over shoulder club painted in alternate bands of green and red; L. supporting at shoulder level miniature four-pillared shrine. Weight is thrown on R. hip; L. knee is bent and L. foot on

higher level than R. Pose and dress generally are like those of 'Indian' type of Lokapāla, Ch. xxvi. a. 006 (see also *Ch. 0010, *General Note*); but fig. on larger scale and drawing neater and more mannered.

The dress also shows minor variations from Ch. xxvi. a. 006 type. There is no corslet, and no protective leather band over hips. In their place a breastplate like that of Ch. 0085, and apparently a draped girdle, green and greenish brown. The latter seems to be gathered round hips and knotted in front, but much of it is lost. Breastplate green with red border, and covered by scrolled ornamentation in gold. Body and skirts of coat of mail are of scale-armour, and an apron of it appears under slit of skirts in front. It is very conventionally treated—on skirts by a network of black lines forming diaper of hexagons or lozenges on yellow ground, on body by a network of yellow three-pointed stars, perhaps representing the lacing, on red ground. Shape of scales therefore cannot be recognized; on arms the coat painted plain red. A narrow belt girds it round waist, and a stole of dark brown and olive hangs about arms.

Arm-guards are plain red; skirt (dull red with green border, and white and red on inner side) falls between legs and on either side in symmetrical folds with artificially scrolled edge. White leg-covering tucked into greaves; these also are of scale-armour, round-edged, divided by metal (?) framework into three horizontal bands, olive, red, and blue. Feet shod with close-fitting black shoes elegantly orn. with gold.

Face is long, with sq. jaws and close mouth, and is human except for distended round eyes. Flesh painted light glowing red; iris of eyes light yellow instead of black. Ears elongated and pierced; lobes apparently distended by large rings fixed in them; but drawing is conventionalized. The small imperial, upcurled moustache, twisted eyebrows, top-knot, and hair on shoulders are light brown, not black.

The three-leaved crown has heavy red draperies flying up stiffly at ears, and on central leaf small Stūpa on blue field. Halo light blue with flame border; tasselled canopy behind, and above a draped valance of the kind found with Bodhisattvas of type *Ch. 002; but upper end here broken in pieces.

Demon is of monster type, and half sits, half reclines, in contorted position. He is painted dark red, with dark green *dhōti*, shock of dark green hair, round white eyes, and upper row of white projecting teeth. Yellow cartouche for inscr. to L. of head, blank.

Workmanship careful, neat, but absolutely lifeless throughout.

Painting 2′ 2¼″ × 7¾″, length with streamers 5′ 9½″.

Ch. xxvi. a. 002. Painted silk banner, retaining four bottom streamers of plain olive-green silk, with leaf and insect designs, as in *Ch. xvii. 001, etc. Other accessories and upper end of painting lost. Remainder in good condition. Work on obv. unfinished, outlines hastily sketched in, and only in few places, while it is carefully finished on rev. But as position of hands is correct on unfinished side, the banner is descr. and reproduced from it.

Subject: *Dhṛtarāṣṭra, Guardian of the East.* Stands ¾ L. on thigh and hand of crouching demon; L. hand hanging by side holds bow; R. raised, arrow. Dress and general style of fig. as in *Ch. 0035; see also *Ch. 0010, *General Note.* There is, however, no mantle, and a sausage-shaped collar, white spotted with black, is clasped round neck.

Head encased in close-fitting helmet of scale-armour, strengthened at sides by triple roll of red leather (?) which passes apparently from cheek to cheek round back of head. Coat of mail ends in short flaps over shoulders, and upper arm protected only by full sleeves. Round scales of armour on lower part of body here overlap upwards, the only instance of their so doing in these banners (but cf. Ch. 00106); on shoulders they overlap downwards. White breeches tucked inside greaves, and feet shod with sandals. Face is entirely human; round, sturdy, and shaven except for a small tuft on chin and a long slight moustache. Eyes are small, oblique, looking intently in front. Flesh shaded with reddish pink on natural grey of silk.

Top jewel of helmet, upper edge of circular green halo, and all above, lost; but remains of purple cloud seen on L. Bow recurved at ends; arrow apparently 'feathered' with leaf-shaped metal plate like M. Tagh. b. 007, barbed end being lost. The demon, who is particularly misshapen, lies on his ribs, R. hand supporting chin, which presses against his nose.

Colouring of main fig. is sombre but well preserved. It consists chiefly of very dark greenish brown (on stole, borders of skirt and coat, ground of corslet, greaves, and arm-guards), and crimson (on skirt, sleeves, and appliqué discs of corslet, arm-guards, and greaves); scale-armour is painted in yellow and red.

Painting 1′ 7″ × 7″, length with streamers 4′ 10″. Pl. LXXXV.

Ch. xxvi. a. 003. Painted silk banner, retaining three bottom streamers of bluish-green silk; other accessories and upper end and middle of painting lost. Bottom streamers have broken off main painting and been rudely sewn on again with grass. Remains of painting dim, but scenes fairly intact.

Subject: *Scenes from the Life of Buddha.*

Scene 1. Perhaps *King Śuddhodhana sending out messengers* in pursuit of his son (incomplete). Ś. sits on dais in raised open pavilion to L., his arms outstretched as if in urgent dismissal; low table stands before him. On R. stand four courtiers bowing with their hands on their breasts and gazing aside at three messengers, who gallop down a winding way between rocks in foreground, with pennons in their hands. Or the upper group may represent King questioning courtiers as to disappearance of his son; and the messengers' ride be a separate scene.

Scene 2. *The Farewell of Chandaka and Kaṇṭhaka.* Of this scene only heads of Prince and Chandaka remain, and the fig. of horse, white with red mane and tail, kneeling on fore-knees. Gautama represented as Chinese dignitary, with short black hair, serious elderly face, and slight moustache and imperial; he wears tall sq. cap (unpainted) and sleeved jacket, incomplete. Chandaka wears smaller cap of same kind; only top of his head preserved.

Scene 3. *Return of Kaṇthaka to Palace* of Kapilavastu. Horse stands riderless before curtained pavilion, from which two women, prob. Yaśodharā and Prajāpatī, have come out at his approach. The foremost bends over the empty saddle with an expression of grief. The other raises her hand to her eyes. A male fig., prob. a servant, runs out from L. with a pennon. Chandaka is not represented.

Architecture, dress, and general style purely Chinese throughout. The men in (1) dressed in long belted coats and black-tailed caps, as in Ch. xx. 008; Śuddhodhana wears under-robe and sleeved jacket; as does also servant in (3). The women wear usual skirt and long-sleeved jacket (see Ch. 0039); their hair done in two high stiff loops, as of the Wife in Ch. xxvi. a. 004. These banners prob. belong to same series, as style of drawing in both is the same; scenes divided from each other by low mountain ranges, while background is sprinkled with little plants. Red and green are only colours used, apart from white, in Ch. xxvi. a. 003; red for some of the coats, the pavilion posts and curtains, Kaṇthaka's mane and tail, and little flowers on plants; dull green for tall grass scattered here and there, and for hill ranges between the scenes. Three (blank) yellow cartouches are placed on edges of scenes.

For representation of same scenes, cf. Ch. xx. 008; xlvi. 004, 007; lv. 0012; and lxi. 002. Length, upper fr. 1′, lower fr. 8″; width $7\frac{5}{8}$″. Length of streamers 3′ 2″.

Ch. xxvi. a. 004. Painted silk banner, broken and discoloured in places, but otherwise fairly preserved. All accessories lost. Probably belonged to same series as Ch. xxvi. a. 003.

Subject: *The Seven Jewels.* At top eight-pointed Wheel, standing on open pink-edged lotus upon pedestal. Below, to L. and R. resp., are Jewel and a strong-box representing treasurer or Minister. Jewel, green and of trefoil shape, rests also on lotus pedestal, with pyramid of flame rising from it. Strong-box is in form of oblong chest with strapped base, standing also on lotus and carrying flaming jewel on each of four corners. Beneath, facing each other, stand General (L.), and Wife (R.). Former advances, swaggering, to R., arrayed in sleeved and long-skirted coat of scale-armour girt with belt at hips and reaching below the knees. His feet are encased in top-boots, and his head in close-fitting helmet and gorget of scale-armour, joining on to coat at base of neck and leaving face only exposed. His face round with straight well-opened eyes and curled moustache and imperial. From belt in front hangs a large quiver (?) or scabbard with round open mouth, narrow neck, and wedge-shaped body. R. hand carries lance with red pennon, L. hand flat red shield shaped like hatchet blade.

The Wife stands opposite, attired in Chinese woman's dress of trailing skirt, and wide-sleeved jacket tied under arms. Her hands are muffled in sleeves upon breast. Her face round with straight eyes and eyebrows, sharp nose, and rosy cheeks. Her hair bound by gold fillet, and done in two high stiff loops which rise up from crown, turn stiffly down, and are turned in again at nape of neck; cf. Queen Vaidehī's in *Ch. 0051, etc.

Underneath comes White Elephant in profile to R., the body long and legs very short, wrongly drawn. His tail is forked and his tusks spring upward from lower jaw. On back a saddle-cloth on which rest lotus and flaming jewel.

At bottom is Horse, $\frac{3}{4}$ L., harnessed for riding; with high saddle (partly destroyed) from which hangs scabbard, and fly-whisk dangling under chin. Tail long, mane cut alternately in short and drooping locks. Horse also long-bodied, and drawing uncertain, especially about legs. These have large joints and hooves on thin shanks; outlines shaky.

Colouring restricted to red and olive-green, both now dull; the red appearing on lotus petals, flames, pennon, shield, straps of General's armour, Wife's jacket, and Horse's mane and tail; olive on pedestals, jewels, and lines of undulating ground which divide various groups. Down each edge three, and beneath the Wheel, one, yellow cartouche for inscr., all blank. For subject, see Ch. 00114, 00471; above, p. 856.

2′ × $7\frac{3}{4}$″. Pl. LXXV.

Ch. xxvi. a. 005. Painted silk banner; retaining all accessories except weighting-board, but in poor condition. Yellow-green silk border of head-piece intact, but interior (originally painted with floral design) almost completely destroyed. Upper end of painting broken off and raw edge sewn afresh to strainer. Side streamer (L.) of faded bluish-green silk, stamped with motifs of flowers or insects in black and whitish glazed paste; side streamer (R.) plain green silk; four bottom streamers of dark blue silk, stamped as L. side streamer and patched with green.

Subject: *Dharmapāla Vajrapāṇi.* Chinese demon type; see under *Ch. 004. Stands facing spectator, upper half of fig. and head turned $\frac{3}{4}$ R.; R. hand by side grasps Vajra by middle, its jewelled top appearing behind R. shoulder; L. arm bent up at elbow and fist clenched; R. foot vigorously turned up with heel only on ground and sole exposed.

In general, type and treatment resemble Ch. 004, but execution inferior. Colouring limited wholly to red or dark pink and green; *dhōtī* being red shaded with orange; stole and streamers red and green on reverse sides; jewels red and green; halo light green with red creeping flame-border and red and green cloud above; lotuses underfoot faint red outlined with darker shade. Fig. high-shouldered and brawny; face rugged with severe and gloomy expression, bony temples, and receding forehead; green irises to eyes.

Flesh left neutral brown of silk, but crossed everywhere, including face, with brush-strokes of acrid pink. This treatment, faintly traceable in Ch. i. 004 and found in modified form also in Ch. 004 and the other Vajrapāṇis, is apparently intended to give prominence to muscles. But here it has become a meaningless lattice-work of coarse pink, and forms the most striking feature of painting, which is coarse both in drawing and colour. In other Vajrapāṇis it is less noticeable, owing partly to use of much fainter colour.

Painting 2′ 1″ × $7\frac{1}{8}$″, length of whole 5′ $10\frac{1}{2}$″.

Ch. xxvi. a. 006. Painted silk banner, belonging to same series as *Ch. xxvi. a. 007. Upper end of painting lost, and all accessories except remains of bluish-green bottom

streamers. Remainder almost intact and colour well preserved.

Subject: *Dhṛtarāṣṭra, Guardian of the East.* A good example of 'Indian' type of Lokapāla; see *Ch. 0010, *General Note.* Treatment much stiffer than in the *Ch. 0035 class, and becomes almost mechanically formal in some instances (Ch. 0085, xxvi. a. 001). The fig. always stands facing spectator; one foot often on higher level than other, that knee bent, and weight thrown on other hip (Ch. xlix. 007). The stiff dress seen thus from directly in front lends itself to specially symmetrical treatment. The effect is increased by careful arrangement of skirt folds and ends of stole in corresponding masses or streamers upon either side (Ch. xlix. 007).

The bodies are long-waisted and slim; the heads generally erect and facing spectator, but sometimes in ¾ profile; the faces human, of non-Chinese type, but generally with grotesque eyes. In Ch. xxvi. a. 006 and xlix. 007, where the eyes are normal, they are practically straight.

The dress has been described in *General Note*, *Ch. 0010, also the chief points in which it varies from 'Chinese' type (*Ch. 0035), the long-skirted coat shape of coat of mail, the protective apron and flaps over hips, the black close-fitting shoes, plain or orn. with gold. None of figs. wear sandals or rope shoes, or mantle. The corslet is generally in form of a cuirass, passing round body under arms and buckled over shoulders by straps as in *Ch. 0035, though the straps do not appear in some instances (Ch. xxvi. a. 006 and xlix. 007); but in some it is a breastplate simply (*Ch. 0010, xxvi. a. 001); in some the two forms are combined (Ch. 0085, lxi. 001).

The various forms of greaves, arm-guards, helmets, and tiaras are described under the separate banners. In the most 'Indian' of banners the haloes are always plain discs of green, surrounded by a ring of close-creeping flame, and with no scroll of cloud at the side; but in one or two of mixed character the flame is omitted (*Ch. 0010), or the cloud is found as well (Ch. lv. 0046). In another of these the halo is white with a flaming top (Ch. lxi. 001). Remains of canopies are seen in Ch. xlix. 007 and lv. 005.

Ch. xxvi. a. 006. Stands facing spectator on hand and knee of seated demon, head turned towards R. shoulder, weight thrown on R. leg and L. side relaxed. Supports arrow with both hands, and carries bow slung on L. arm. Coat of mail reaches mid-thigh; scales round-edged and overlapping downwards on body and shoulders, oblong on skirts; overlapping not indicated. On each shoulder on short lotus stem stands a flaming jewel.

Head and neck protected by helmet of plain leather, with rim curling out at ear, and high sausage-shaped collar, as in Ch. lv. 0017. Leather (?) centre-piece strengthening lower belt is in shape of horned beast-mask; flaps over hips of tiger-skin; apron in front apparently of leather. Breeches tucked inside greaves; greaves of whole leather or plate-armour with variegated appliqué discs over calves as descr. in *Ch. 0010. Arm-guards of striped horizontal bands round arms. Shoes have gold binding and ornamentation round sole.

The face is serious but not ferocious, with long straight pointed nose of 'Caucasian' type; long eyes level; long narrow moustache, and fringe of short beard and whisker. Hands long-fingered and slim. Upper part of halo and all above, lost.

Colour well preserved, and consists almost entirely of yellow (on scale-armour and ground of helmet); crimson (on collar and borders of helmet and coat of mail); both colours mingled on tiger-skin and skirt, and olive-green on corslet, animal mask, pleated edge of coat of mail, and one side of stole. Hip-belt and reverse of stole are dark brown; and girdle, breeches, inside of skirt, and sleeves on upper arm, white. Flesh warm pink carefully shaded with red.

From size, edging, pattern of rhomboid band at foot, and streamers, as well as from general workmanship, the banner evidently belongs to series *Ch. xxvi. a. 007; and pairs with Ch. xlix. 007.

For other Lokapālas of 'Indian' style, see Ch. 00107, 00469; lv. 005. 1′ 3¾″ × 5¼″. Pl. LXXXVII.

***Ch. xxvi. a. 007. Painted silk banner** of Indian type, recalling series *Ch. lv. 004. Upper end of painting and accessories lost, remainder well preserved.

Subject: *Mañjuśrī*; cf. Ch. lv. 0030. Fig., ¾ R., stands on conventional yellow-centred pink and white lotus. R. hand carries sword over shoulder, L. arm raised from elbow and hand held well out, palm uppermost. Body slim-waisted and curving like those of *Ch. lv. 004 series, and face of same type. Legs stiffly draped in long skirt of striped green, red, yellow, and white over *laṅgōṭī* of chocolate brown; girdle of pink and white scroll-patterned stuff with green and yellow ends; stole of chocolate brown and yellow; red scarf across breast; narrow band of greenish blue, double or triple, spotted with white and strung with two lozenge-shaped metal orns., hanging from shoulder to knee. Tiarā a single circlet set with three high triangular gold orns. and lotuses at ears; no anklets or armlets. Hair done in high black cone on top of head and loose ringlets on shoulders. Flesh painted dark olive-green throughout, with traces of red on inner ear, lips, palms of hands, and soles of feet. Between oval halo and blank inscr. cartouche in R. top corner, what appears to be tail of snake.

For other paintings of the same series, see Ch. xxvi. a. 006, 009, 0010, 0012, and xlix. 007.

1′ 3⅜″ × 5¾″. Pl. LXXXVII.

Ch. xxvi. a. 008. Painted silk banner; upper end of painting with head-piece and side streamers lost; bottom streamers, of dark brown silk, and weighting-board preserved. Painting fragmentary.

Subject: *Bodhisattva.* Stands ¾ L. upon two lotuses, that under L. foot only preserved. R. arm raised from elbow and hand stretched out, palm uppermost, second and third fingers bent; L. hand in *vitarka-mudrā*; pink lotus bud on tiara. Painting of type *Ch. 002. Colouring apparently chiefly pale blue and scarlet on exceptionally dark brown of gauze, but much lost and dimmed. Dark pink cartouche for inscr. to L. of head, blank.

Painting 1′ 10½″ × 7½″, length with streamers 5′ 4″.

Ch. xxvi. a. 009. Painted silk banner of same series as *Ch. xxvi. a. 007. Upper end of painting lost and all accessories except remains of blue-green bottom streamers. Slightly broken and colours dimmed, but otherwise in good condition.

Subject: *Bodhisattva* (unidentified). Stands facing spectator on pink and white lotus, R. hand held down in front of hip, L. raised from elbow and hand turned out, palm up; second and third fingers of both bent, and other fingers extended. Face broad with low forehead and wide nose; eyes cast down and gentle expression. Dress and coiffure are those of more 'Chinese' type of *Ch. 002, but less elaborate; colouring is less transparent, and workmanship seems that of other banners of the series. Top-knot of double-leaf form, tiara a simple fillet with jewel in front and lotus buds and white streamers at ears. Robe is very long and full, pulled up in overhanging folds at knee and trailing on ground at sides as in Ch. 0081. It is bright orange with white overfall; under-robe red above, and white at feet; the shawl-like stole dark pink and olive. There are no ear-rings or chains. Traces of pinkish-white paint remain on flesh. Halo circular, in rings edged with red and green. Chinese influence is seen, not only in more elaborate dress and its more flowing treatment, but in tapering fingered hands and careful trailing of girdle ends over the Padmāsana —all conventions of the *Ch. 002 type. 1′ 3½″ × 6⅛″. Pl. LXXXVII.

Ch. xxvi. a. 0010. Painted silk banner, in same style and apparently of same series as *Ch. xxvi. a. 007. Upper end of painting lost, and all accessories except top of bluish-green bottom streamers.

Subject: *Bodhisattva* of feminine type with Pōthī; perhaps Avalokiteśvara or Mañjuśrī. Fig. stands facing spectator on single white lotus, green edged. R. arm hangs by side holding coil of stole lightly between finger and thumb, L. hand holds Pōthī at breast. Body of extremely feminine contour, and thrown out to L. hip in characteristic 'Indian' pose.

Draped from hips to ankles in voluminous yellow skirt shaded with red and bordered with olive-green, and raised in conventional folds at middle and sides. Top of skirt turned over at waist and makes an over-fall, painted dark pink, reaching to mid-thigh. Over this is girdle, a wide piece of drapery, dull green and white, drawn round hips and gathered up in knot in front, from which ends wave to knee. Across breast a red scarf, and behind shoulders knots of white drapery, and stole of olive and chocolate which coils stiffly round arms to ground. In front of tiara is representation of Stūpa, and on upper arm are large armlets; jewellery otherwise consists of usual necklet, ear-rings, and bangles. Hair black, apparently done in a high cone, but top is broken off, and falling in heavy mass behind shoulders. Halo circular, of dim variegated rings of green and red. Flesh is warm pink shaded with deeper tint and outlined with black. The face much like that of Ch. xxvi. a. 009, but chin less heavy and eyes less downcast. Drapery is very conventional; R. arm disproportionately long and hand very large; but drawing of fig. otherwise is graceful and well proportioned. Good example of 'Indian' type. Blank inscr. cartouche on R. edge. 1′ 3½″ × 6″. Pl. LXXXVII.

Ch. xxvi. a. 0011. Fr. of painted wooden panel, back covered with canvas and lacquered black. Painting rubbed away, showing only traces of small scenes down side containing standing and kneeling figs. in red Chinese coats, and remains of Chin. inscr. (illegible). Prob. adoration of sacred objects as down sides of large silk paintings, *Ch. 0051, etc. Two rivet holes in middle. 10⅜″ × 3¾″.

Ch. xxvi. a. 0012. Painted silk banner, lower end of, with remains of two streamers of flimsy bluish-green silk. Shows feet of standing *Buddha*, on lotus with green centre and single row of down-turned dark pink petals. Under-robe of olive-green with dark pink border descends on feet. Work coarse.

From size, style, streamers, and ornamental row of rosettes in rhomboidal panels below, evidently one of 'Indian' series *Ch. xxvi. a. 007.

3¼″ × (width) 5¼″.

Ch. xxvii. 001. Painted silk banner, with head-piece of silk gauze cut in one piece with body and bound with greenish-blue silk. Side and bottom streamers of same. Head-piece, much torn, painted with jewel on lotus, and underneath a valance with scrolled and vandyked bands. Painting in fair condition, but very dim.

Subject: *Scenes from Life of Buddha,* Chinese in style, divided by miniature hill ranges; (1) and (3) nowhere else represented amongst paintings of Collection.

Scene 1. *Announcement of Illumination.* Across foreground five disciples advance in file, waving their arms with ecstatic gestures. They wear long belted coats of scarlet or green, top-boots, and black-tailed caps as in Ch. xx. 008. Sleeves of coats hang down far below hand. Vajrapāṇi appears above within ring of bell-shaped thunderbolts, on scroll of red cloud, stamping and brandishing his arms in triumphant dance. He is short, thick-set, naked except for a red loin-cloth and head-dress of spikes, and carries bell (?) in L. hand. Steep-peaked mountains fill background.

Scene 2. *Life of Austerities.* In cave amongst jagged rocks Śākyamuni sits in meditation on seat of leaves, naked except for red loin-cloth, and greatly emaciated. In foreground facing each other lie a pair of deer, perhaps intended to symbolize a separate scene, that of First Sermon in Deer Park of Benares.

Scene 3. *Bath in Nairañjanā stream.* Śākyamuni, in same condition as in preceding scene, shown crossing stream by help of weeping-willow branch, which has bent down just within his reach. A *Deva* dressed like a Bodhisattva, prob. divinity of tree, leans over a cloud watching him. Neither fig. is haloed, but Śākyamuni has the *uṣṇīṣa* both in this and preceding scene.

Drawing comparatively rude, as in Ch. xxvi. a. 003, and colouring slight, consisting only of olive-green and dull brown of scenery, red for scanty garments portrayed, and red or dark pink for clouds. Red alone is at all vivid.

Scenes not in chronological sequence, whether read up or

down. The deer below the second suggest First Sermon in Deer Park of Benares, and this would rightly follow Illumination celebrated at top. But the second scene itself must represent the six years of Austerities near Uruvilvā, naturally preceding the crossing of Nairañjanā shown below. For another representation of the Austerities, see Ch. lv. 0012.

A yellow cartouche (blank) is placed at side of two upper scenes. Painting 2′ 8″ (exclusive of head-piece, *c.* 25″) × 7½″, length with streamers 5′ 10″. Pl. LXXVII.

Ch. xxvii. 003. Painted silk banner, broken at edges, retaining head-piece and side streamers. Former of soft natural-coloured silk (plain), bound at edges with fine printed silk like Ch. 00309. Suspension loop of faded pink silk; streamers of fine silk gauze, dull blue, woven in open lozenge pattern like Ch. 00344, and hung at points and sides with tufts of raw silk, yellow, green, and salmon-coloured.

Subject: *Bodhisattva* (unidentified); in style and technique of type *Ch. 001. Stands ¾ R. on white lotus with bright red tips and outlines; R. hand pendent before hip, with second and third fingers bent up; L. in *vitarka-mudrā* at breast. Body, pliant and graceful but long in proportion to legs, slopes forward to hips; outward curve carried still further down by lines of skirt until it sweeps in again to ankles. Head again large and set forward on shoulders, so that fig. as a whole has a somewhat dwarfish and high-shouldered effect.

Bodhisattva wears no under-robe or stole; upper half of fig. bare except for elaborate necklace with its jewelled chains and pectoral orn., bunches of streamers, and the light scarf across breast. Arms are orn. with armlets having a large circular shield on outer arm, and double-hoop bangles; extra bead necklace added within gold collar. Head bending downwards; face of conventional 'Chinese Buddhist' type with low forehead, large (here almost Roman) nose, small back-set chin, and wisp-like moustache and imperial. Eyes long and narrow, but effect of largeness given by wide setting marked for eyeball by semicircular line round inner corner.

Colouring consists mainly of light pink and green applied in transparent washes; skirt being pink with green borders, scarf on breast faint salmon with flower pattern in pink, streamers and jewels orange, green, and pink. Flesh is delicately tinged with pink throughout; inside of ears and hands, soles of feet, edge of lower eyelid, mark on upper lip, and *ūrṇā*, in red; moustache, imperial, and eyebrows, green over black ink line. Fresh and well preserved. For replica see Ch. lv. 0019. Painting 2′ 10½″ × 10⅛″, length with head-piece 3′ 7¼″.

Ch. xxvii. 004. Remains of painted linen banner, with Chin. inscr., retaining head-piece border and loop. Much torn.

Subject: *Avalokiteśvara*, standing facing spectator; R. hand in *vitarka-mudrā* at breast; L. by side. Dress, coiffure, etc., of 'Chinese Buddhist' style, as in *Ch. 002. Colouring crimson and greyish brown; good workmanship. *C.* 3′ 8″ × 10″.

Ch. xxviii. 002. Fr. of silk painting, showing detail evidently from upper part of procession like Ch. xxxvii. 003. Upper edge curved, showing that painting when complete was prob. a large arch-shaped one of the same kind. Material, fine greenish gauze backed with cream silk of coarser texture; background slightly stained, but condition generally good.

In R. bottom corner appears an elaborate draped and jewelled canopy, the tassels waving to suggest motion. On L. upon streaming clouds rises a nymph, facing towards the canopy, with leg drawn up, and arms raised as in act of blessing. Above, facing L., float two phoenixes with pheasant-like heads and large plumy fan-shaped tails spread flat behind them; upper bird crested. Remaining space filled with lotus blossoms and scrolls of cloud.

Apart from conventional canopy, the workmanship is bold and free, giving fine effect of lightness and movement. This is specially marked in the poise of nymph, her long stole coiling and dropping far below her and heightening soaring effect of fig. The brush-work, however, is hasty, and the painting was evidently meant to be seen at a distance, as the detail in many places is extremely rough, e.g. the hands and arms of nymph on close inspection prove to be absolute deformities. Her face, on the other hand, clearly drawn and full of character. Colouring chiefly crimson, blue, and orange (on canopy), and crimson, white, blue, and copper-green (on clouds); phoenixes painted in bars of red and yellow with white breasts; nymph's garments bright crimson and green (skirt) or yellow and dark brown (stole). 2′ 1″ × 1′ 5″ × (gr. width) 2′. Pl. LXXVI.

Ch. xxviii. 003. Silk painting representing *Kṣiti-garbha* as Patron of Travellers, Lord of the Six *Gati*, and Protector of Souls in Hell, with attendants. Whole picture traced, but colouring only begun in parts by washes of light green paint. Silk light tussore-coloured, in good condition. For similar representations, see under *Ch. 0021.

K. sits facing spectator on lotus resting on rectangular pedestal with overhanging top; R. leg bent across, L. pendent with foot resting on small lotus, R. hand raised holding crystal ball, L. holding beggar's staff. Dress, halo and vesica, canopy, and rock-altar, as in *Ch. lviii. 003; and on opposite sides of latter, kneeling priest and seated lion.

Down sides sit the Ten Infernal Judges, nine in magisterial head-dresses as in *Ch. 0021, and holding rolls of paper; tenth in scale-armour and helmet. By each stand two attendants holding rolls of paper in folded arms. They wear long skirts and wide-sleeved jackets; their hair is parted and tied in two bunches at side of head with loops of hair below; cf. Ch. 00355, where they have same feminine aspect.

From upper part of K.'s vesica stream six rays intended to support representatives of the Six *Gati*, but figs. are not drawn in.

A dozen (blank) inscription cartouches placed about sides; no donors or dedicatory panel.

1′ 11″ × 1′ 7¾″.

Ch. xxviii. 004. Silk painting representing the

Eleven-headed and Six-armed Avalokiteśvara (Kuan-yin), seated, without attendants. Border lost and edges incomplete all round, but colouring well preserved and unusually bright and varied.

Avalok. sits on Padmāsana with legs interlocked, upper hands, L. and R., holding up discs of sun and moon. Former contains three-legged bird; latter, tree of immortality thickly painted in black, and two abbreviated symbols evidently representing hare and frog. Middle hands in *vitarka-mudrā* on either side of breast, lower hands stretched outwards over knees, palms uppermost and thumbs and first fingers joined. Eleven heads treated as in *Ch. 00102, two in profile being resp. yellowish green and blue-grey, and Dhyāni-buddha's yellow with pink cheeks. Other heads and rest of fig. pink shaded with glowing orange.

Background sprinkled with scarlet and white lotuses amidst groups of leaves; in L. upper corner oblong yellow panel showing faint traces of inscr. now illegible. Drawing rough but bold; chief interest of picture lies in colouring. This consists mainly of glowing orange on flesh, skirt, and scarf across breast; of deep indigo blue and strong copper-green on stole, which winds in wide flat curves from arm to arm; of clear pale yellow on ear-rings, bracelets, and massive necklace and armlets; and of dense black on hair, eyes, eyebrows, and all outlines of fig. and accessories. All these colours found combined with Indian red and lighter blue in canopy, vesica, halo, and Padmāsana, against brownish background. 1′ 7″ × 1′ 3″.

Ch. xxviii. 005. Fr. of paper painting showing part of simplified *Maṇḍala, prob. of Amitābha.* R. side of Buddha preserved with hand holding alms-bowl, but head lost. Beside him stands Avalokiteśvara, holding willow branch over R. shoulder, and excessively badly drawn; dress, jewels, and coiffure those of an 'Indian' Bodhisattva. Round L. upper corner runs orig. border orn. with Chin. double angular wave-pattern in black. This is broken at bottom on L. by fig. of woman donor, kneeling with hands in adoration (uncoloured). Colouring red, grey, black, and (the Buddha's flesh) gamboge. Work careless besides being crude; e.g. Avalok.'s R. foot is painted as if a L. foot and with only four toes. 1′ 4½″ × 1′.

Ch. xxviii. 006. Large silk painting with Chin. inscr., representing *Thousand-armed Avalokiteśvara* with attendant divinities. Complete except along bottom; painted border of flower sprays—peony, mallow (?), and lotus—on red ground, but no sewn border; in excellent condition, and colour exceptionally fresh.

General design and treatment of central fig. same as in *Ch. 00223, etc. Pale whitish disc here encloses Avalok. and his halo. Background divided into upper and lower haloes; the upper a thin light blue now almost gone, leaving predominant light greenish grey of silk; the lower a deep-toned gentian-blue. Former representing sky is sprinkled with small gilded stars and falling blossoms of double lotus and mallow; latter represents tiled floor, and is divided by narrow gilded lines into squares filled with conventional gilt star-shaped designs.

On this decorative background are placed at intervals the few attendant figs.:

(i, ii) On piled-up clouds in R. and L. top corners resp., *Bodhisattvas of Sun and Moon.* They sit with their arms spread out from elbows, lotus buds drooping from their hands; their discs as usual bordered with flame-colour and white. But horse 'Vāhana' here assigned to deity of flame-coloured border, and geese to deity of white.

(iii, iv) On tiled floor kneel on lotuses, R. and L. resp., *Sage* with hand at head in salutation, and *Goddess of Virtue* with her dish of flowers. Latter's dress slightly different from that which she wears in other paintings of series. It consists of flower-spotted skirt of vermilion and blue, draped like Bodhisattva's from the hips, and perfectly plain tight-fitting bodice of pink with blue elbow frills and crimson under-sleeves. Her hair also done in plain high top-knot towards back of her head.

(v, vi) Thigh-deep in tank stand two armour-clad *Nāgas* (with no snake emblems) holding up Avalok.'s disc.

(vii, viii) In bottom corners stride *Fire-headed Vajrapāṇis*, red and blue, with their customary emblems, against background of flame. A small elephant-headed demon kneels before one, and boar-headed demon before other.

Avalok. himself is single-headed; flesh dull yellowish pink; hair light blue; halo of hands a pinker flesh-colour. Among most noteworthy of his emblems are Moon's disc showing well legendary Tree, Frog, and Hare with mortar, and Gorgon-faced shield in one of L. hands. But good examples of almost all may be seen in this picture owing to its excellent finish and preservation. Nimbus round his head has appearance of radiating spears; it is in form of superimposed series of pointed rays which are brilliantly coloured in luminous light gentian-blue and copper-green, supplemented by two shades of pink. Same striking colours are used for variegated petals of the Padmāsana. Outlines of latter, as well as jewellery of all figs., altar vessels, and folds of Avalok.'s pink robe, are gilded.

There are three inscriptions only, one before Sage, one before blue Vajrapāṇi, and one added on margin of Avalok.'s disc, containing only epithets descriptive of deities. Other cartouches blank.

Workmanship is refined, and detail highly finished throughout. Ornament is almost excessive, rosette or scroll patterns covering even inner walls of tank, with emaciated Sage clad in flower-spotted *dhōtī* and full set of gilded jewellery. Painting consequently makes little appeal to imagination, but with its gay colouring and background of flowers and stars, it takes a high place as a piece of decoration and of perfectly mastered technique.

Naturalistic flowery border, and spacing of figs. so as to give more value to background, suggest that it may, perhaps, be of later date than rest of the *Ch. 00223 series. 5′ 6″ × 3′ 10½″. Pl. LXIV; *Thousand Buddhas*, Pl. XLII.

Ch. xxviii. 007. Tattered remains of tracing on silk damask, with Chin. inscr., showing life-size *Bodhisattva*, standing facing spectator. Dress and coiffure in 'Indian' style of Ch. lv. 0032; R. hand and arm, and whole

of lower end with feet, lost. Inscr. contains tracing done on each side in $\frac{1}{4}''$ lines of blackish-grey paste. Triangular head-piece of same damask, cut in one with the main part, traced with seated Buddha, and bound at edges with 3″ border of thick figured silk. Complete width of damask (selvedge to selvedge 2′) has been used.

Damask orig. reddish pink, faded to light rusty red; of thin quality, now extremely brittle and crumbling to pieces. Ground plain, pattern twill. Design: down each side of web band of floral orn. made of linked stems, 5″ to 6″ from edge, with pairs of curled leaves growing from them towards edge, and pyramidal flowers growing towards centre. Down centre, groups of four birds flying inwards round quatrefoil rosettes. All forms much stylized.

Figured silk of head-piece border of same weave as Ch. 0076, etc., with fine warp and broad soft weft. Obv. faded to obliteration of colour and design. Rev. shows ground to have been pale blue or bluish white, with design of circular floral spots in salmon-pink. These spots are *c.* $4\frac{1}{2}''$ in diam., and are placed in rows, 1″ apart horizontally, and 3″ apart vertically, the centre of a rosette in one row corresponding to space between two rosettes in the rows above and below. Spots seem to have quatrefoil centres; from which radiate four butterfly-like flowers with scrolled tendrils spreading from their tips, and four small birds flying inwards, between them, to the centre. In weft is brighter salmon-red, not appearing on surface in part preserved, so far as can be seen. Fig. silk (unpicked) *c.* 5′ 2″ × 7″. Whole tracing 12′ × 2′, length with head-piece *c.* 13′ 2″. (Design of damask) Pl. CXXII.

Ch. xxx. 001. Painted silk banner; fragmentary, with remains of head-piece, one side streamer, and two bottom streamers, all in tatters. Accessories of grey or brown silk of various shades; interior of head-piece lost.

Subject: *Bodhisattva.* Stands $\frac{3}{4}$ L.; L. hand stretched, palm up, before breast, thumb, second and third fingers joined; R. above it, palm downwards, third finger turned down. Dress and general style of fig. as in *Ch. 002, but workmanship inferior. Face, so far as preserved, roughly drawn and of poor type with low forehead and retreating double chin. Colouring chiefly white outlined with crimson (on skirt and lotus underfoot), crimson, slate, and green; but much gone.

Painting 1′ 8″ × 7″, length with streamers 3′ 2″.

Ch. xxx. 002. Dated woodcut on paper (A. D. 947), from same block as Ch. 00158 (q.v.). Good impression. Three paper loops at top, for suspension. Block 1′ $3\frac{1}{2}''$ × $10\frac{3}{8}''$.

Ch. xxxiii. 001. Silk painting, with Chin. inscr., representing *Śākyamuni or Amitābha,* with attendants and donors. Intact with border of dark purple silk, but surface worn.

Buddha seated with legs interlocked, R. hand in *vitarka-mudrā*, L. at breast holding red lotus bud. Canopy on trees above, altar on tiled floor in front; no lake. Attendants, seated or standing with hands in adoration and identified by inscr., consist of: (i) two monkish disciples, haloed; on L. (Buddha's R.) with pink and white complexion and regular features, orange and crimson robes, *Maudgalyāyana*; on R. with grotesque features, open mouth, and distended eyes, crimson and black robes, *Śāriputra.* Cf. similar figs. attendant on Avalok. in *Ch. 00102. (ii) two Bodhisattvas, robes of *Ch. 002 style; on L. *Ākāśagarbha*, on R. *Ratnaguṇa.* (iii) two Bodhisattvas, robes of style *Ch. lv. 0014; inscr. effaced or not written in.

At bottom, dedicatory inscr., 7 or 8 ll., almost obliterated, with donors on either side—man kneeling on L., woman on R., young man standing behind one and little girl behind other. Costumes and head-gear as in *Ch. 00102; little girl in long skirt, black jacket, hair tied in two bunches at sides of head with projecting tails.

Colouring crimson, olive-green, grey, and black on brownish-green background; workmanship indifferent. (Inscriptions read by Mr. Yabuki.)

2′ $3\frac{1}{2}''$ × 2′; with border 2′ $6\frac{1}{2}''$ × 2′ $1\frac{1}{2}''$.

Ch. xxxiii. 002. Silk painting representing *Thousand-armed Avalokiteśvara*; without border, but otherwise complete and in good condition. Treatment of chief fig. same as in series described under *Ch. 00223; but picture of smaller size, and secondary figs. reduced to four only: Bodhisattvas of Sun and Moon in L. and R. top corners resp., and donor in each of bottom corners.

Sun and Moon are seated on their characteristic 'Vāhanas', geese of former scarlet and white, horses of latter scarlet or dark red; disc behind each blue, bordered in Sun's case by broad band of vivid red, in Moon's of white.

Donors—man on L. and woman on R., latter a gracefully drawn fig. but now somewhat rubbed—wear Chinese secular costume of general type seen in *Ch. 00102, but simpler. Woman has no ornaments, and no pins in her coiffure; her jacket is not black, but carmine over greenish skirt; coloured lining of coat and sleeves not shown. Man's head-gear not wide-brimmed black hat, but peaked and tailed black cap, as in Paradise picture Ch. xxxviii. 004.

Workmanship good; drawing clean; colour well preserved and of special interest owing to peculiar flesh-colour used for chief fig.: an unusual greenish brown shaded with apricot tint, which gives it a very bronze-like effect. This combines with two other prevailing colours—a brilliant light carmine and strong ultramarine blue distributed on canopy, Padmāsana, robes, and emblems—to form very striking piece of colour; a parallel in this respect to Bhaiṣajya-buddha of Ch. 00101.

Avalok. is single-headed, with Dhyāni-buddha on front of tiara; hair ultramarine blue; jewellery (except tiara) dull light blue with ultramarine jewels; tiara reddish brown; discoloration across face; emblems same as in *Ch. 00223, etc. Canopy and tank appear above and below, compressed to bring them within limits of picture. 2′ 7″ × 2′ $0\frac{1}{2}''$.

Ch. xxxiii. 003. Large silk painting representing *Paradise of Amitābha (or Śākyamuni)*, with side-scenes showing legend of Ajātaśatru and meditations of Queen

Vaidehī, as in *Ch. 0051. General composition and style of work the same. Broken and much faded, especially in upper half; extreme top and bottom lost; side-scenes bordered on outside by band of dull purple, painted in white with repeating rosette pattern in imitation of brocade.

The central Buddha much destroyed; blue-haired, and seems to have R. hand in *vitarka-mudrā*, and L. open below it. His two chief Bodhisattvas sit in European fashion holding resp. in their hands nearest him a scarlet and a light blue and purple lotus bud in blue glass bowls; their other hands in *vitarka-mudrā*. Attendant Bodhisattvas also for most part hold scarlet and purple lotus buds, or have their hands in pose of adoration.

The dancer before altar is played to by six musicians, on clappers, flute, harp, mouth-organ, and lute—all of the same type as in *Ch. lii. 003, except mouth-organ, which shows straight pattern of instrument seen in Ch. liii. 002. In bottom corners, on separate terraces, are black-haired Buddhas with attendant Bodhisattvas, seated behind small altars before which kneel nymphs offering flowers. They are seated cross-legged like him, but with their feet concealed, and have their outer hands respectively in *abhaya-* and *vitarka-mudrā*, their inner hands held out with palm up and fingers open.

Infant souls kneel on steps sloping from these corner terraces into lake, or sit at their head at feet of Bodhisattvas. On raft or platform over lake in middle foreground are grouped two confronting peacocks and pair of confronting parrots, with a Garuḍa in middle playing on lute. Purple and scarlet lotuses rise from water, but there are no trees except behind canopies of three chief figs.; behind the Buddha, red-flowering trees descr. in *Ch. lii. 003; behind Bodhisattvas, long curling leaves of Sāl (?) trees.

Colouring light, background being light green over most of picture, while light blue is largely used in decorative parts, and light green, grey, and orange for Bodhisattvas' robes. Their flesh and that of nymphs painted white with red outlines, that of musicians flesh-pink, and jewellery and altar-vessels 'bronze' colour. Black used only for hair of secondary figs. and for small visible portions of floor of main terrace.

Drawing and treatment generally resemble those of *Ch. lii. 003, but are not so good. Upper half of picture, showing pavilions and long roofs and galleries of the celestial mansions, is unusually bare of decoration and small figs. and balances badly the crowded lower half.

The *side-scenes* (see *Ch. 0051) are exceptionally numerous, and represent:—

On R. (*i*) Śākyamuni on Mount Gṛdhrakūṭa: grassy hill-slopes under precipitous cliffs, and Ś. rising behind one, visible to waist; (*ii*) Śākyamuni (?), seated on cloud, floating down to neck of flat ground between two waters; (*iii*) Queen Vaidehī worshipping Buddha; Bimbisāra also kneels in foreground; (*iv*) Ajātaśatru pursuing Vaidehī with sword; the two ministers in profile in foreground; (*v*) Vaidehī visiting Bimbisāra in prison, and Mahāmaudgalyāyana and Ānanda, in form of two men in secular Chinese dress, approaching them; (*vi*) Buddha, in guise of a Chinese dignitary, attended by M. and A. in secular Chinese dress, approaching Vaidehī (?) in prison. In foreground the courtyard gate, closed, and Ajātaśatru, within, walking towards it but not perceiving them.

On L., Queen Vaidehī meditating on *Sukhāvatī* as follows:—(*vii*) On Sun, a red disc, beside mountains; (*viii*) on Moon (?), a white disc outlined with red; (*ix*) on Ground of *Sukhāvatī* (?) a green square within a coping; (*x*) on Water (?), a white square within a coping; (*xi*) on the Lake of Eight Virtues, or the Flowery Throne, a tank from which grows a scarlet lotus; (*xii*) on the Mansions of *Sukhāvatī*, represented by a pavilion; (*xiii*) on the Jewel-trees, a row of five, red-flowering; (*xiv*) on a chased gold treasure chest (?), perhaps representing the Jewels of the Paradise; (*xv*) on jewelled canopy, raised upon platform or base of throne; (*xvi*) on rebirth in *Sukhāvatī*: her own soul, in garb of Chinese woman enclosed in pointed light blue halo, rising from scarlet lotus; (*xvii*) on Avalokiteśvara; (*xviii*) on Mahāsthāma; (*xix*) on Buddha Amitābha; (*xx*) on same, similarly represented.

All side-scenes in purely Chinese style, as in *Ch. 0051, etc. Blank cartouche, yellow or mauve, for inscription, placed by each scene. 5′ 5″ × 3′ 11″.

Ch. xxxiii. 0011. Silk painting with Chin. inscr., representing *Bodhisattva*, seated, with attendants (mostly destroyed). Incomplete all edges, but central fig. whole and in good condition.

The Bodhisattva is seated with legs interlocked on scarlet lotus, R. hand on thigh holding erect flaming sword, L. Vajra; Dhyāni-buddha on front of massive conical gold tiara covered with scarlet lotus orns. Dress, coiffure, and fig. generally as in *Ch. 00102; hair grey-brown; flesh white shaded with pink and outlined with red; circular halo and vesica, flame-edged; and outer nimbus of white with red border enclosing whole fig. and Padmāsana. Canopy of conventional flower-spray.

Attendants consisted of two figs. seated or kneeling in bottom corners, and two others above; but of former only extreme edges of dress remain, and of latter only knee and hand. Hand of fig. in R. corner holds bow. On inner side of these two figs. are two infants seated or kneeling on scarlet lotuses, clad only in scarlet boots, and holding up scarlet lotus buds to central Bodhisattva. Two others (one mostly destroyed) float down on clouds beside canopy.

Chin. inscr. in each of upper corners, that in L. only partially preserved. Colouring chiefly scarlet, green, yellow, and slate-blue on light fawn background; clean workmanship of conventional type. 1′ 5½″ × 1′ 3½″.

Ch. xxxiv. 001. Painted silk banner; broken at ends and edges, all accessories lost.

Subject: *Avalokiteśvara* (Kuan-yin). Stands facing spectator; L. hand by side; R. hand carrying at shoulder round-bodied vase of red and blue porcelain with metal base and neck, in which are red lotus bud and leaves. In front of tiara, in place of Dhyāni-buddha, is similar miniature vase with two scarlet lotuses. Fig of slender feminine type, with mild

dignified expression. Dress, accessories, and style of workmanship as in *Ch. 001, etc. Colouring, much dimmed and discoloured, shows remains of pink and white (on skirt and girdle), green (on stole), dull purple (on scarf), and pale blue (on jewels); but predominant tone now dull brown of silk with faint touches of red and blue. 2′ 5½″ × 10¼″.

Ch. xxxiv. 003. Painted silk banner; retaining all accessories but in poor condition. Upper half of painting lost except for cartouche from R. edge bearing Chin. inscr.

Head-piece originally a triangular panel of silk painted with seated Buddha (?) and lotuses, backed with sage-green silk and bound with silk of bright reddish pink. But painted centre has almost completely broken away, though attempts have been made to preserve it by sewing it to the backing with stout yellow twist. Chin. chars. are scrawled in ink on border and back. Side streamers of light green silk (discoloured), L. strengthened at top with backing of yellow silk; on inner side of R. is patch of dark bottle-green silk, formerly strengthening attachment of painting. Four bottom streamers of dark blue silk (discoloured). Heavy weighting-board has its lower half carved in relief in form of conventional open lotus, picked out with black and yellow on dark red ground. It shows clearly method of attachment of streamers' ends, which are first doubled over slip of cane and then thrust into groove along edge, the whole being prob. secured with gum.

Subject: *Avalokiteśvara* (Kuan-yin), as 'Giver of Long Life'—on authority of inscr., but, as upper half of fig. is lost, no distinctive features remain. Bva. advances ¾ L. on lotus tipped and outlined with dark red. Dress and style of painting as in *Ch. 002. Colouring chiefly orange, red, olive-green, and slate, well preserved.

Painting 1′ × 7″, length with streamers 4′ 3½″, head-piece H. 5½″.

Ch. xxxiv. 004. Painted silk banner, retaining all accessories but in poor condition. Head-piece of cream silk much decayed; binding, side and bottom streamers of plain brown silk, frayed and discoloured; weighting-board roughly cut and painted light red; suspension loop of dark blue and yellow silk brocade, strung with iron ring. Among brocade frs. one strip shows row of six-petalled flowers dark blue and green on yellow ground, between which spring plants with green and light blue leaves and dark blue buds. Chin. chars. scrawled on border, back and front.

Subject: *Virūpākṣa, Guardian of the West*; replica of Ch. xxiii. 001. Stands ¾ L. on thick-set demon with clawed hands, who arches himself on hands and knees, head sunk between shoulders. Upper end of painting lost, and headless fig. attached direct to head-piece. L. arm stretched down and forwards, holding hilt of sword; R. arm and shoulder lost. Fig. and dress of style *Ch. 0035 (see also *General Note*, *Ch. 0010); but breeches are tucked inside greaves and feet shod in plain sandals.

Colouring much lost and dimmed; it consisted mainly of red, white, and brown, the red best preserved, and distributed on mantle, folds of drapery round waist, streamers, lower border of coat of mail, and inner edge of sleeves and skirt; also on *dhōti* of demon. Pleated edging of coat of mail, stole, and corslet were olive, and reverse of stole light blue; but paint has practically vanished. Scabbard painted in sections red, olive, orange, and white.

Painting 1′ 5½″ × 7¼″, length of whole 4′ 10½″.

Ch. xxxiv. 005. Linen painting with Chin. inscr., showing *Avalokiteśvara*, standing. Partially destroyed at bottom, otherwise in fair condition; no border. Fig., pose, dress, and emblems as in *Ch. 0052, etc.; but better drawing, and more variegated colour. Willow instead of lotus. Eyes oblique, hair blue, flesh white shaded with pink (much lost); dress blue, crimson, and soft green. Inscr. contains only salutation to Kuan-yin. 5′ 9½″ × 1′ 9½″.

Ch. xxxvi. 001. Silk painting representing *Avalokiteśvara* (Kuan-yin), standing, without attendants, but with small donor on either side. Complete with border of fawn-coloured silk at top and sides, but lower end with Padmāsana and feet of fig. broken away; remainder in good condition. Good example of 'Indo-Chinese' type, and almost pendant to *Ch. 0088 in general treatment and in accessories.

Face and fig. are of same rounded type, pose of body and arms same. But while in *Ch. 0088 R. hand holds willow spray, it here supports flask; L. hand, with fingers closed to grasp neck of flask, holds nothing. There is no over-skirt, the skirt falling freely about legs; round neck is string of black beads common to all figs. of the six-armed Avalokiteśvara (see *Ch. 00102). Dress and orns. otherwise same as in *Ch. 0088, and in brighter tints of same colours; but from shoulders rise streamers of cloud in Chinese style, coiling about halo. Eyes slightly oblique, but lines of eyelids barely curved. Moustache and beard, indicated by single curling line, appear on lips and chin. Scarlet lotus sprays scattered in background; blank yellow cartouche for inscription in L. upper corner.

Donors, boy and girl, stand on either side; boy on Avalok.'s R. with hands in adoration, girl on L. offering a scarlet lotus. Their dress and appearance entirely Chinese, boy wearing long trousers, girl long skirt, and both a ¾ length jacket with long wide sleeves, tied round waist. Upper part of boy's jacket white, and skirt part made of red and white flowered material; in the girl's this pattern is reversed, skirt being white and close-fitting bodice part of red-flowered yellow stuff. Her jacket also fastens in front and is turned back to leave a V-shaped opening at neck. Paint in both figs. is mostly gone, but their hair is black; the boy's done in two bunches at corner of head with projecting tails like boy attendants' in Ch. 00224, the girl's brushed down either side of head and turned up in roll round neck.

2′ 5″ × 1′ 9¾″. Pl. LXVIII.

Ch. xxxvi. 002. Dated woodcut on paper (A.D. 947), from same block as Ch. 00158 (q.v.). Uneven impression; torn. Block 1′ 3½″ × 10⅜″.

Ch. xxxvii. 001. Silk painting representing *Eleven-headed and Six-armed Avalokiteśvara* (Kuan-yin), seated,

with attendants and donors. Narrow border of brown silk preserved; painting almost intact and in fairly good condition.

Dress, pose, and accessories of central fig. generally as in *Ch. 00102; Padmāsana rises from small tank; no altar. Upper hands, L. and R., hold up symbols of Sun and Moon, former containing three-legged bird; latter, tree, frog, and hare. Middle hands in *vitarka-mudrā* on either side of breast, holding each, between thumb and forefinger, spray of pink and white lotus. Lower hands placed palm to palm, pointing downwards, before lower part of body; thumb bent and touching, fingers extended and meeting at tips; see also Ch. 00105. Flesh deep pink shaded with orange-red; same colouring used for seven Bodhisattva heads on top, while heads in profile are resp. yellow and dark olive-green, and Dhyāni-buddha's head yellow with red cheeks.

Attendants consist of fourteen small Bodhisattvas seated or kneeling seven a side, with hands mostly in pose of adoration and with no distinctive emblems, and of four Lokapālas ranged in row in background. Small seated Buddhas on clouds fill upper corners. The Kings are of ferocious aspect, with grotesque eyes and bright red complexions; their armour that of Lokapālas in banners; see *Ch. 0010. Vaiśravaṇa with Stūpa is distinguishable on L. and Virūpākṣa with sword on R.; other two carry no distinguishing emblems.

Four of Bodhisattvas have shawl-like stole, opaque under-robes, and white girdles of *Ch. 002 type; rest like Avalok. wear Indian variety of Bodhisattva dress; flesh of all deep pink like his. This pink, dull crimson, and dark green and grey form practically whole colouring of picture; though vesicas and haloes show traces of pale blue now almost entirely lost. Avalok.'s ornaments are painted entirely in dark green, and were perhaps orig. gilded over this. Jewellery of attendant Bodhisattvas is red-brown picked out with yellow and black as in *Ch. 0051, etc. Work throughout rather rough.

Lower end of painting contains central panel (blank) for dedicatory inscr. and eight kneeling donors, four men on R., four women on L., with a narrow cartouche, also blank, before each. All wear costumes and head-gear of donors in *Ch. 00102. This end of painting, however, much worn, and figs. hardly distinguishable. 3′ 6″ × 2′ 3″.

Ch. xxxvii. 002. Silk painting, with Chin. inscr., representing *Progress of Vaiśravaṇa* and attendants over the ocean; cf. Ch. 0018. Complete with border of greenish-blue silk, and in excellent condition.

Vaiśravaṇa gallops to R. on white horse with scarlet mane and tail, turning back in saddle to his followers, with R. hand raised (thumb and third and fourth fingers joined) and L. grasping reins. He is young and human in appearance, with sq. face, straight nose and eyes, and wide mouth, open as if calling to his followers. His hair, including recurved eyebrows, moustache, and tufts of beard and whiskers, is dark brown; iris of his eyes light blue.

He wears long close-fitting coat of scale-armour reaching half-way down shin, yellow with scarlet straps and border; and arm-guards and greaves of same. Scales represented by conventional three-armed crosses as in Ch. xxvi. a. 001 (see also note on V.'s armour in Ch. 0018), and cover corslet as well as coat, but prob. by accident. A leather skirt-piece, orn. with flowers, and not meeting in front, is secured round body by lower belt. Beneath coat floats out long olive-green under-robe. On head a high three-leaved crown, while streamers of flame fly from shoulders.

Horse has ornamented saddle with stirrups, crupper cloths, and frontlet of scale-armour attached to its head-stall and covering its face. Its accoutrement otherwise consists of breast-band, to which as to crupper are attached numerous knobs as seen on horse in D. VII. 5 (*Ancient Khotan*, i. p. 298; ii. Pl. LIX). Its head small in proportion to neck and body; its legs short. On its head a pair of black and white feathers.

In front march two Rākṣasa carrying red pennons; behind come a host of others carrying a large flag similar to that of Ch. 0018; a miniature Stūpa; a battle-axe, and bow and arrows. These all have grotesque faces (two with animal jaws, etc.), and are mostly attired in coats of scale-armour like Lokapālas of banners. Most have their legs bare below the knee; but a few have leggings or high boots, or are cross-gartered, with shoes on feet.

At the rear stand two human figs. in Chinese secular dress consisting of white under-robes and long wide-sleeved scarlet jackets. These prob. represent the donors, man and wife. The man has three-leaved mitre-like head-dress, and carries a roll (of office or of sacred writings?); the fair-faced woman has her hands in adoration, and her hair done like that of women donors in *Ch. 00102. In foreground are more Rākṣasa, and three savage semi-nude goblins with jars and brazen vessels under their arms, apparently quarrelling with the Rākṣasa and with each other. Coins (square-holed) and jewels are scattered amongst them. One of them attacks one of Rākṣasa with a branch of coral (or Nāga tree); so they evidently represent the Nāgas from whom Vaiśravaṇa won his treasure.

Whole host swept along on cloud from Vaiśravaṇa's palace (represented as a Chinese pavilion in L. top corner) over the sea, which is bounded in background by mountain range and in foreground by cliffs. In water here float scarlet lotuses, infants, ducks, a shark-jawed monster, and a nymph offering flowers, while on cliffs appears a deer. Flowers are scattered in the air above.

The workmanship good and well finished throughout; the colouring, which is in good condition, consists almost entirely of yellow (scale-armour), scarlet (robes, straps, and borders), and white (robes, horse, infants, and pavilion) on the greenish brown of the background.

Chin. inscr., 2 ll., fairly preserved, on yellow cartouche in R. corner.

2′ 2″ × 2′ 0½″. Pl. LXXIII; *Thousand Buddhas*, Pl. XXVI.

Ch. xxxvii. 003 and 005. Two large pieces of silk painting with curved tops, forming respectively R. and L. sides of one arch-shaped picture. The centre is lost, but must have contained a seated Buddha.

Parts preserved show (R.) *Mañjuśrī* and (L.) *Samantabhadra*, mounted respectively on white lion and elephant, which advance towards centre surrounded by a host of attendant Bodhisattvas, Lokapālas, demons, and nymphs. Their mounts are led by Indian attendants, and preceded by pair of musicians with uplifted heads, playing on flute and mouth-organ. The whole assembly is carried on purple clouds.

The chief Bodhisattvas sit on their steeds with one leg pendent, their outer hands raised and their inner held out palm uppermost, thumb and forefinger joined in all. The attendant Bodhisattvas, like them, are pale-complexioned with peaceful expressions; but demon followers have grotesque features and colouring of deep red. Amongst those on R. Virūḍhaka (?) with club; and two of others have helmets crested resp. with the dragon and the snake; the latter also carries sword. On L. is Dhṛtarāṣṭra with his arrow, and peacock crest upon his helmet. The attendant walking in lower outer corner of each fr. wears the dress of Chinese dignitary (high-waisted under-robe and wide-sleeved jacket), but coiffure and halo are those of a Bodhisattva. Each carries a fly-whisk and is attended by two unhaloed nymphs carrying white towels. The animals' leaders are painted chocolate-brown, not black, and have features of very coarse type. The soles of their feet and palms of their hands are pink. Dress, jewels, and accessories throughout are of 'Chinese Buddhist' type (as descr. in *Ch. 001, etc.); drawing delicate for large size of picture. Types throughout conventional, and arrangement of groups also follows well-established lines. Colouring generally light in tone, dresses and jewels being chiefly light green or red, grey, or yellow, with a large amount of white and flesh pink on animals' haloes and bodies of Bodhisattvas. The only heavy colour lies in the dense black hair of the majority of the figs. (Samantabhadra's alone is cobalt-blue) and the dark brown of animals' leaders.

L. half (005) is considerably broken, but R. is almost complete except for R. bottom corner; surface well preserved.

Shape of picture puts free hanging out of the question; probably intended to occupy back of vaulted alcove, or of aisle of antechapel.

003. 6′ 6″ × 3′ 5″. *005.* 7′ 2½″ × 3′ 7″. *Thousand Buddhas*, Pls. IV, V.)

Ch. xxxvii. 004. Remains of large silk painting, with Chin. and Tib. inscr. (illegible), showing apparently Maṇḍala of Avalokiteśvara. Incomplete all sides, but unbroken in itself except at corners, and in fair preservation.

Above is Śākyamuni seated on Padmāsana with legs interlocked, R. hand in *vitarka-mudrā*, L. holding alms-bowl in lap, attended by two seated Bodhisattvas, four shaven disciples (two old and emaciated, two young), and an assembly of lesser Bodhisattvas kneeling with hands in adoration. Before him is low altar with kneeling Bodhisattva on either side; and below this a large yellow panel with dedicatory inscr. in Chin. and Tib. completely illegible.

Lesser Bodhisattvas are of conventional 'Chinese Buddhist' type, but the two seated Bodhisattvas distinctively 'Indian'. They are seated in the Indian 'enchanter's' pose with one leg pendent; and their angular attitude, long oval haloes, coiffure, jewellery, and robes are those of Bodhisattvas in 'Indian' banners Ch. lv. 007, etc. Flesh of one white, that of other yellow (mostly lost). The latter holds in L. hand the flaming jewel; both have their hands next to Śākyamuni in *vitarka-mudrā*; white Bodhisattva rests R. hand on knee also with thumb and forefinger joined. One of old disciples' heads has been almost destroyed; other three are complete, though faded, and drawn with subtlety and expressiveness.

Below Samantabhadra and Mañjuśrī, on the elephant and lion respectively, advance from either side towards centre of picture, escorted by Bodhisattvas and boy musicians. They too are seated with one leg pendent; S. with L. hand in *vitarka-mudrā*, R. horizontal at breast; M. with R. hand held out palm uppermost, L. over knee with thumb and forefinger joined. They and their attendants are of 'Chinese Buddhist' type. One armed King (without attribute) attends each, and their mounts are led by striding Indians in crimson *dhōtīs* tucked up to the knees. The young musicians in front are in Bodhisattva dress and play on clappers, pipe, flute, and both types of mouth-organ (see *Ch. lii. 003); foremost of all march two Indian boys carrying bronze vessels. About their canopies, on either side, sweeps down bevy of tiny Bodhisattvas clustered within a wreath of purple cloud; and gracefully drawn Gandharvīs (*apsaras*) float in spaces of air. Above, groups of mountains fill corners of picture.

Lower end divided off by heavy band of rhomboidal orn., but its straight line broken by haloes of three large Bodhisattvas rising from below. About half of central fig., a thousand-armed Avalokiteśvara, remains, and face and two (upper) hands of Bodhisattva on L.; but that on R. is completely lost.

No other composition like this exists in the Collection, except the incomplete and much inferior Ch. 00222. The balance of groups and colours and even pose of individual figs. follow well-established lines; but the workmanship is of finest quality throughout, and composition instinct with exceptional dignity and breadth of spirit. The chief element in colour a peculiarly luminous crimson, which is widely distributed on robes and canopies, and forms with brown of background the dominant colouring of picture. The white, now almost entirely lost, of elephant and lion and of faces and figs. of the Bodhisattvas must originally have added a third note of almost equal importance. The yellow of Śākyamuni's flesh and of the central inscr. panel forms a fourth; minor colouring carried out chiefly in dull purple, a lighter red, and some very dull bluish grey. Black, found only in hair of all figs., in alms-bowl, and in figs. of Indian guides and acolytes, serves to solidify and hold together the several groups.

The drawing is of great delicacy and sureness of touch, and naturally shows its scope most in the expressive drawing of faces and heads, though even these are limited only to pensive and quiet types owing to subject of picture. The

opportunities of expressing something more shrewd or eager, in the heads of priests or boy musicians, are fully realized. 5′ × 5′ 10″. Pl. LIX; *Thousand Buddhas*, Pl. III.

Ch. xxxviii. 001. Fr. of large silk painting representing *Thousand-armed Avalokiteśvara*; broken all edges, and subject hardly distinguishable through fading and discolouration. Contains, however, head and fig. almost complete of Avalok. with inner series of arms preserved on L. p. side; and on other, whole of arms, hands, and halo, with seated Nymph holding platter of flowers and head of second fig. beyond; also shoes of Lokapāla with traces of drapery of other figs. above.

General design same as in series described under *Ch. 00223. Avalok. here single-headed, with Dhyāni-buddha on tiara. Face, body, and inner arms and hands were strong yellow, hair light blue (?), robe and shoulder draperies crimson; outer hands flesh pink outlined with red. But paint discoloured to almost general dark brown; workmanship at best was coarse. 3′ 4″ × 3′ 7″.

Ch. xxxviii. 002. Upper half of painted silk banner, fragmentary, all accessories lost.

Subject: *Bodhisattva.* Fig. above waist only remains, ¾ to R., R. hand raised holding long-stemmed blue lotus; L. arm by side, hand lost. Face of 'Chinese Buddhist' type, with oblique eyes, full cheeks, and small mouth. Dress of 'Indian' variety (see *Ch. lv. 0014), with scarf (crimson and green) knotted across breast, white draperies behind shoulders, armlets with semicircular shield on outer arm, heavy necklet with three pendent jewels, and tiara in form of solid metal fillet with three large elliptical jewels upstanding in front. Hair done in high rounded top-knot, and falling behind shoulders.

Colouring unusual, and well preserved; consisting of warm flesh-pink on flesh, dull blue on hair, orange picked out with white on metal-work, with light blue and green on stones. Broad outlines throughout of very faint grey, which throw into prominence the black eyes overshadowed by strong black lines of eyebrow and eyelash. Latter are the outstanding feature of fig. Workmanship good.

Behind, remains of circular halo (green); and above, of fluted valance in floral and vandyked band.

12⅝″ × 6⅞″. Pl. LXXXI.

Ch. xxxviii. 004. Large silk painting representing *Paradise of Śākyamuni or Amitābha*, with side-scenes showing legend of Kalyānaṃkara and Pāpaṃkara as in Ch. liv. 004, and donors. Complete with border of yellowish-green silk, but lower end of painting broken; remainder in good condition, and colour fairly preserved. In general composition and treatment similar to *Ch. 0051; *lii. 003, etc., but simpler.

Pose of presiding Buddha (Śākyamuni, cf. App. *E*, III. vii; *Annales du Musée Guimet*, xli. p. 129) same as in Ch. v. 001; Avalokiteśvara, on R., has hands in adoration; Mahāsthāma, on L., R. in *vitarka-mudrā*, L. horizontal below it. Between them and the Buddha on each side is small shaven disciple, of childish appearance, haloed, with hands in adoration. Rest of company consist of Bodhisattvas, musicians, and dancer, grouped together on terrace; musicians playing on reed-organ, lute, psaltery, and clappers—all as in *Ch. lii. 003 (for musical instruments see Miss Schlesinger's note, App. *H*). One pavilion only represents the Paradise. Background above plain, sprinkled only with orange flowers, and seated Buddhas rising on clouds. Lotuses rise from lake, but there are no infants.

Like Ch. liv. 004, however, this Paradise differs from the *Ch. 0051 series in arrangement of foreground. In place of subsidiary Buddhas, bottom corners are occupied by good examples of Garuḍas with plumy semi-floral tails, and hands in adoration, standing on rocks. On large isolated terrace in centre foreground appears a seated Buddha of unusual type, with a small Bodhisattva and shaven disciple kneeling in adoration on L. and R. resp. The Buddha wears crimson robe lined with white which covers him closely to neck, ankles, and wrists. On it are painted: on L. shoulder, red disc of Sun showing traces of Sun-bird; on R. shoulder, white disc of Moon with the tree of immortality; on front of body, Mount Meru, and on either side of last a man in white loin-cloth—on L. standing, with two pairs of arms, upper raised, lower with hands in adoration; on R. seated cross-legged with hands in same pose. Disciple has halo and vesica like Bodhisattva, and wears monkish robes with addition of necklace.

Drawing good and refined, especially in faces and hands of Bodhisattvas and women donors, etc.; detail otherwise not highly finished. Colour again chiefly crimson on dull light green, with orange on Bodhisattva robes and tiles of terrace, turquoise blue on altar cloth, and dark brown on piles supporting terrace. Altar vessels and some of jewellery, dark red; remainder of jewellery 'bronze' colour or light green (not finished).

The *side-scenes* are in usual Chin. secular style, and run as follows:

On R. (*i–iv*) correspond exactly to scenes (*ii–v*) of Ch. liv. 004; scene (*i*) of latter is not found;

(*v*) shows only palm tree on open ground amongst mountains, and red flower rising from ground, but seems to be separate scene, as it has separate cartouche;

(*vi*) is same as scene (*vi*) of Ch. liv. 004. Head-dress, coiffures, and robes also the same throughout.

On L. (from bottom up):

(*vii*) King and Queen seated on ground with bag before them; prince sitting upright on low isolated rock, clad only in red loin-cloth; cf. Ch. liv. 004. *vii*.

(*viii*) King and Queen still seated near bag, and near it prince, in same guise as preceding scene, kneels with hands in adoration or supporting offering.

(*ix*) Bag has disappeared; King and Queen walk away; in background is prince seated on rock, cross-legged, and with hands in adoration, while white lion rears on hind legs before him brandishing its paws.

(*x*) Prince in same position; before him comes down, kneeling on cloud, personage in dress like King's.

(*xi*) Mountain peaks only; but may be separate scene, because of separate cartouche.

All scenes take place on open ground in mountainous country, and are divided by curving range of hills, or pine-crowned cliffs; except between (*i*) and (*ii*) and (*x*) and (*xi*), where there is a wall. Regarding interpretation of scenes, cf. M. Chavannes' notes on Ch. liv. 004, App. *A*, V. A.

Donors number six men kneeling on R., and five women on L. grouped in three ranks: a bald-headed old woman in front, prob. the grandmother; behind her a younger woman alone, and in the third rank three young women in row. Behind last again are three children (boys). Their dress is on same general lines as tenth-century dress in Ch. lviii. 003, but much simpler and without orns. Men and boys wear loose belted coats, no under-tunic showing; three of men wear black hats as in Ch. lviii. 003, the other three the black peaked and tailed caps common in side-scenes and Life-scene banners (for approx. dating of costumes see above, p. 885). The women's jackets have less wide sleeves than in lviii. 003, and are not of the regulation black, but orange, chocolate, or crimson. Elaborate head-dress of Ch. lviii. 003 is conspicuously absent, and hair done plain in flat round top-knot like a mushroom-head, or in large rippling backward-waving crest like the dancer's in banner Ch. xlix. 005. The boys have their hair done in round tufts above temples as in Ch. xxxvi. 001, and apparently close-cut to head or partly shaved below.

Surface much worn. 5′ 2½″ × 4′. *Thousand Buddhas*, Pl. VII.

Ch. xxxviii. 005. Large silk painting with Chin. inscr. showing two standing figs. of *Avalokiteśvara* (Kuan-yin) approaching life-size. Broken round edges and down middle, but figs. practically intact, and drawing and colour excellently preserved.

The Bodhisattvas stand facing each other, ¾ respectively to R. and L., their outer hands raised in *vitarka-mudrā*, the hands nearest each other also raised and carrying (Avalok. on L.) a yellow flower, (Avalok. on R.) a flask. The latter also holds willow branch between closed finger and thumb of L. hand. Dhyāni-buddha on front of tiaras. Dress, coiffure, and jewellery are of the elaborate 'Chinese Buddhist' style as seen in *Ch. 002, etc.; but ornament, though carefully treated in detail, not overdone. Shawl-like stoles, grey and maroon resp., lined with light green; under-robes Indian red; long skirts orange; girdles white; metal-work of jewellery in bronze colouring noted in *Ch. 0051, etc.; hair black; flesh white delicately shaded with pink, and outlined with black. Heads held erect; ears elongated and conventionally treated, but features otherwise delicate and very finely drawn. Eyes narrow, and with eyebrows very oblique. Eyebrows, small curling moustache and imperial painted green over black. Circular haloes and draped canopies above heads; flowers falling through air.

Inscr. 9 ll., incomplete at top, on large yellow cartouche between heads.

Workmanship of high standard throughout, and an example of the conventional 'Chinese Buddhist' art at its best. 4′ 11″ × 3′ 5″. Pl. LXXXI; *Thousand Buddhas*, Pl. XV.

Ch. xxxviii. 006. Remains of large silk painting; seven strips joined side to side to form a square, with remains of border down one side. No coherent subject, but frs. of different subjects (altar, pavilion, and attendant Bodhisattvas) on different strips, some of which are upside-down with relation to others. Colour and drawing almost effaced. 3′ 4″ × 3′ 6″.

Ch. xxxviii. 007. Painted linen banner; all accessories lost, surface smudged.

Subject: *Bodhisattva*, prob. *Avalokiteśvara*, standing facing spectator; R. hand at breast, third finger bent, thumb and other fingers erect; L. hand by side holding fold of stole; Dhyāni-buddha in grey robe on front of tiara. Fig. purely Indian in style, and workmanship primitive. Dress as in silk banner *Ch. lv. 0014, etc.; colouring only yellow, light blue (including blue hair), and dull red. Circular halo, and straight striped valance above. 1′ 10″ × 6½″.

Ch. xl. 001. Remains of painted silk banner; much broken and picture almost obliterated, but evidently showed souls rising from Lake Sukhāvatī as in Ch. lv. 0015. There are five seated Bodhisattvas rising alternately on either side as in better-preserved example, but corner which may have contained infant soul too mutilated to be intelligible. Figs. are like those of Ch. lv. 0015 in dress, pose, and physical type, but the drawing has been slightly finer. The colours used are again red and olive-green and a little dark brown or purple. No accessories preserved. 2′ 1½″ × 7″.

Ch. xl. 004. Painted silk banner, with head-piece, streamers, and weighting-board complete. Streamers of light green silk, decayed. Painting in fair condition.

Subject: *Bodhisattva*. Stands ¾ L. with hands hanging crossed before body; practically a replica of Ch. 003. Colouring light blue, green, and crimson considerably worn.

Painting 2′ 3″ × 7⅛″; length of whole 6′.

Ch. xl. 005. Painted silk banner; all accessories lost; painting in fair condition.

Subject: *Avalokiteśvara*. Stands facing spectator; R. hand raised, prob. carrying willow branch effaced or never painted in, L. hand by side carrying flask; Dhyāni-buddha on front of head-dress; small curling moustache and beard in copper-green over black. Dress mixture of types *Ch. 002 and 0017. Skirt (light red) drawn up, billowy mass showing bare feet and ankles; short plain over-skirt with light blue frill as in Ch. xxii. 004, etc.; crimson drapery over breast and behind shoulders; and chocolate stole lined with copper-green over shoulders and arms. Jewellery also copper-green (except tiara, yellow) with jewels of crude light blue. Eyes oblique. Treatment and accessories (halo, etc.) in 'Chinese Buddhist' style as in *Ch. 002; but reminiscent of type *Ch. lv. 0014 in pose, shape of face, forms of jewellery, dark red outlines of all flesh, and light blue hair in stiff top-knot and mass behind shoulders. 2′ 1½″ × 7″.

Ch. xl. 006. Fr. of painted silk banner showing

head (facing spectator) of *Kṣitigarbha* as monk; lips and robe crimson, shaven head and chin light blue; same type as Ch. xxi. 0013; for other representations, see *Ch. i. 003. 7" (incomplete) × 7".

Ch. xl. 007. Paper painting showing *Thousand-armed Avalokiteśvara* (Kuan-yin) standing on lotus; ascetic with staff and nymph offering flowers seated upon smaller lotuses on either side. In upper corners red lotus sprays. Avalok. has only one head, and wears 'Indian' type of Bodhisattva dress as in Ch. 00125. Thousand hands form halo reaching to knees, and hold usual emblems as in Ch. lvi. 0014, etc., and one rather unusual, the writing-brush. Hands at breast hold blue lotuses, not pink.

Nymph has her hair done in two loops like Queen Vaidehī's in *Ch. 0051; ascetic leans back holding up R. hand in gesture of salutation. Execution coarse; colouring only orange-red, dark blue, light yellow, and green, red and yellow being used for Avalok.'s face and body. 1' 4" × 11½". Pl. XCI.

Ch. xl. 008. Silk painting representing *Six-armed Avalokiteśvara* (Kuan-yin), seated, with side-scenes and donors. Complete and in perfect condition; with border and suspension loops of coarse linen (now removed).

Avalok. sits on pink and scarlet-tipped lotus with legs interlocked. His upper hands hold up discs of Sun and Moon, Sun in R. hand showing three-legged bird, Moon containing only tree; middle hands in *vitarka-mudrā* on either side of breast; lower hands on knees, R. holding rosary, L. flask. In front is small altar. He has only one head, crowned with massive tiara, on front of which is Dhyāni-buddha.

His person, jewellery, robes, and hair treated as in *Ch. 00102, etc., but halo and vesica painted in plain concentric rings of white, orange, and pale green; canopy consists of branch of pink and white lotuses and scarlet star-shaped flowers with brownish-green leaves. In upper corners are resp. outspread lotus and lotus bud; down either side come scenes of miracle representing Calamities from which Avalok. saves his worshippers.

These correspond wholly in style and partly in subject to series of scenes on R. side of large 'Maṇḍalas' of Bhaiṣajya-buddha, *Ch. lii. 003 and liii. 002; and also to side-scenes in Ch. lvii. 001; cf. inscr. in *Ch. lii. 003. Here scenes accompanied only by blank cartouches. They are, from above down:—On R. (*i*) Man, naked except for loin-cloth and with his hands tied behind back, held by two others, while fourth brandishing sword is about to cut off his head.

(*ii*) Two men fleeing with their arms over their heads, while thunder-cloud in sky showers black drops on them.

(*iii*) Man standing calmly with hands upon his breast, in midst of pyramid of flame into which another appears to have pushed him.

On L., (*iv*) Man being pushed by another over precipice; but half-way down it he is seen again seated composedly on cloud with his hands on his breast.

(*v*) Man, naked except for loin-cloth, kneeling in little hut with *cangue* round neck, while in front of him lie wooden pillory-like instruments for fettering hands and feet.

(*vi*) Man standing as in (*iii*), surrounded by snake, scorpion, and tiger.

Scenes, where necessary, divided from each other by mountain ranges, and drawing of figs. animated and expressive. Avalok. himself very carefully drawn, and painting well-finished throughout. Colouring well preserved and rather unusual, consisting only of terra-cotta red (on Avalok.'s skirt, scarf, and head ribbons, flowers of canopy, and coats and flames in side-scenes), harsh light yellow (on jewellery and blank cartouches for inscr.), white shaded with very light pink (on lotuses and Avalok.'s flesh), and very dark brownish olive (on Avalok.'s stole, altar-cloth, and leaves of canopy). No blues, purples, or bright greens or pinks are used; silk itself of specially dark greenish-brown.

Lower end of painting occupied by donors, who kneel on either side of blank yellow panel for dedicatory inscr.: two men on R., woman and child on L. Foremost man holds censer; others have their hands in adoration with lotus buds between. Figs. in excellent condition, and good examples of costumes described in *Ch. 00102. But women's head-dress consists only of central framework and pins, without flowers or leaves, and is painted red and white. Little boy standing behind her has same dress and coiffure as boys in Ch. lvii. 004; tunic here of flowered pink and white.

2' 9" × 2' 0¼". *Thousand Buddhas*, Pl. XXII.

Ch. xl. 009. Wrongly entered as Ch. *xi. 009*, q. v.

Ch. xli. 001–4. Four paper pounces like Ch. 00159, each showing *Buddha* seated on Padmāsana under draped canopy hung upon flowering trees. Haloes and vesicas circular; in 001 and 002 orn. with borders of trefoil or petal shapes, in 003 and 004 plain. Buddha in each has his mantle drawn partly over R. shoulder; poses of hands various. In 001 L. hand lies in lap, while R. placed horizontally, palm to breast, with second and third fingers curled in to palm. In 002 and 003, R. hand in *vitarka-mudrā* at breast, L. in *bhūmisparśa-mudrā* over knee. In 004 R. hand in *vitarka-mudrā* at breast; L. horizontal below it, palm up, second and third fingers bent. Whole design drawn in with ink in 004, and part of halo and vesica decoration in 001–002. On back of 004 also drawn roughly Buddha in same attitude as one in front. All in good condition. *001* and *002*, 1' 9½" × 1' 2¾"; *003*, 1' 0¾" × 8¼"; *004*, 1' 0½" × 10½".

Ch. xliii. 003. Woodcut on paper, with Chin. text, and fig. of *Amitābha Buddha*. Same as Ch. 00203 (*q.v.*). Good condition. 10½" × 6¾".

Ch. xliii. 004. Woodcut on paper, with Skr. and Chin. text containing *Buddhist charm*. Date given by inscr. A.D. 980.

In middle, within small circle, is seated Bodhisattva, eight-armed, holding emblems (extra emblem on L. side as if for ninth arm, evidently mistake). Round circle are printed nineteen concentric rings of Buddhist liturgical Skr., prob. containing charm but too corrupt to be decipherable, and

enclosed within circular border of much conventionalized emblems. Whole circle rests upon outspread lotus, rising from tank and upheld by two divinities in armour; between latter lies oblong panel containing Dhāraṇī in 21 ll. Chin. with date as above. Spandrels between upper edge of circle and oblong rectangular border enclosing whole filled with clouds; circular medallions containing outspread lotuses superposed on these and on waters of tank in lower corners. Border again consists of series of Vajras, broken by sixteen of same medallions; eight in corners and in middle of each side enclosing open lotuses, and remainder Eight Lokapālas (four in armour). Over all medallions containing lotuses, whether in border or in corners of panel within, are printed from different block mystic Skr. letters.

Good condition. 1′ 5″ × 1′ 0⅝″. Pl. CII.

Ch. xlvi. 001. Painted silk banner; all accessories lost and painting broken in places.

Subject: *Bodhisattva.* Replica of Ch. i. 002, but colouring much faded where not completely lost. Painting has evidently been more hastily finished; for no halo is shown and no turban, the folds of latter being painted as hair and only narrow head-band left set with metal orns. Large loop of drapery at shoulders has also been made into hair. Skirt and drapery across back, scarlet; girdle and bunch of drapery at nape of neck, green; stole green and light blue; all much worn. 2′ 1″ × 7″.

Ch. xlvi. 002. Painted silk banner; considerably worn and faded; both ends of painting and all accessories lost.

Subject: *Bodhisattva.* Stands ¾ L. on yellow lotus edged with red; R. hand holding up red and yellow lotus bud; L. horizontal before breast, palm up and fingers extended. Fig. and painting of type *Ch. 002, but less finished. Colouring subdued, consisting of light brown hardly distinguishable from background, and olive-green, white, and small quantities of red and yellow. Face has benign expression, mouth parted in slight smile; ears of normal length, but with slightly distended lobes, unpierced. Yellow cartouche for inscr. to L. of head, blank. Cf. Ch. xxiv. 002. a. 1′ 10½″ × 7″.

Ch. xlvi. 003. Painted silk banner; somewhat broken and much faded; all accessories lost.

Subject: *Bodhisattva.* Fig., which has feminine air, stands ¾ L. on two lotuses respectively light blue and pink outlined with darker shades of same. R. hand, horizontal at breast, carries stemless flower of narrow-petalled blue lotus in palm; L. is upraised beside it; second and third fingers and thumb of both hands bent. Dress is of same variety as Bodhisattva's of *Ch. 0088, except that there are no draperies behind shoulders or across breast. Robe or skirt, of faded crimson with light blue border, is so draped as to give effect of loose trousers reaching to ankles; latter are orn. with rings. Over-skirt of same colours, and held by girdle of light green and blue. Stole also of light blue and green, but green has disappeared everywhere except for smallest traces. Gold work of jewellery is also quite colourless; possibly no paint has been applied.

Face short and round, with almost level eyes and very straight line to cheek and nose. Hair done in large conical top-knot at corner of head and spreading mass on shoulders. Tiara of same type as in Ch. xxii. 004, but cap portion here painted as hair, and puggree-like drapery falling behind is here red and quite distinct. Accessories (halo, canopy, etc.) and style of drawing as in *Ch. 002, etc. Yellow cartouche for inscr. to L. of head, blank. 2′ 2¼″ × 7¼″.

Ch. xlvi. 004. Painted silk banner with Chin. inscr. Upper end of painting and all accessories lost; remainder fairly preserved, with occasional holes. Pairs with Ch. xlvi. 005.

Subject: *Scenes from Life of Buddha*; Chinese in style; not elsewhere represented in this form (see end); four, divided by orange bands orn. with white daisy-like flowers seen in profile. Beside each scene is cartouche with Chin. inscr., placed alternately on R. and L. (inscriptions read by Mr. A. D. Waley).

Scene 1. *Unidentified*; painting and inscr. both incomplete. Of former only heads and part figs. of four men preserved, standing or walking, and dressed in long coats, scarlet or purple.

Scene 2. *Prince preaching the Law to Five Ministers.* The term *chü-lun*, tr. 'Ministers', of uncertain significance (A. D. Waley); but figs. prob. do represent Ministers sent after Gautama by his father to persuade him to return. Mission of these Ministers descr. in *Abhiniṣkramaṇa-sūtra*, but their number there given as two. (See S. Beal, *Romantic History of Buddha*, pp. 151 and 161–8.) Gautama sits to R. upon mat, in jacket and under-robe, with hair dressed in the four-pronged fashion descr. under Ch. lv. 0011–12; lxi. 002. Five Ministers are scattered before him, sitting on their heels, with hands clasped at breasts or muffled in their sleeves.

Scene 3. *Prime Minister tells Śuddhodhana that the Five Ministers have left city.* Ś. sits on scarlet-draped platform on L., with attendants on either side. Prime Minister stands facing him.

Scene 4. *Five Ministers search for Prince.* The five fill respectively corners and middle of panel; each carries a lighted taper, and two in corners turn their backs searching in opposite direction.

The dress of figs. as follows: Ministers in scenes (1), (2), and (4): long belted coats, scarlet or purple, over white under-robes; black tailed caps in scene (4), in other scenes hair (?) done close round head with small projecting bunch at back and short straight lock by ear. Prime Minister and King in scene (3): long loose pink coats to feet, Prime Minister with official sash descr. in Ch. 00114; hair as Ministers in scenes (1) and (2). Attendants, scene (3): in wide-sleeved jackets and white under-robes.

Figs. small and widely scattered in all scenes; 'composition' lacking in unity and movement. Drawing hasty, and without detail beyond that mentioned, except for tree in each scene suggesting open air. Colouring consists only of vermilion or scarlet, dark purple or brown, pink and green, besides remains of dark blue on coat of one fig. in scene (4), and light slate-blue on palace wall in (3).

For representation of similar scene, i.e. 'Messengers' search' for Prince (and report), cf. Ch. xx. 008; xxvi. a. 003; xlvi. 007; lxi. 002.
2′ 1½″ × 7⅜″.

Ch. xlvi. 005. Painted silk banner with Chin. inscr. Upper end of painting and all accessories lost, remainder considerably broken, but parts preserved are fresh. Pairs with Ch. xlvi. 004.

Subject: *Scenes from the Life of Buddha*: four, apparently following on those of the preceding and not elsewhere represented. Inscr. cartouche at side of each, and painted bands binding scenes, of same pattern as in Ch. xlvi. 004. (Inscriptions read by Mr. A. D. Waley.)

Scene 1. *Unidentified*, upper half both of painting and inscr. lost. Remainder shows personage in pink robe seated on mat, while others in vermilion jackets and white under-robes stand round: Śuddhodhana and attendants as in scene (3) of preceding banner. The flowered skirt of woman or women attendants also seen at back. In front of Ś., and apparently moving off but with head turned back to him, is a man in black-tailed cap and vermilion belted coat.

Scene 2. *King* (*Śuddhodhana*) *and Queen* (*Mahāprajāpatī?*) *returning to Palace.* Ś. and M. advance to R., followed by two women attendants and preceded by man in scarlet coat, who turns head round to them. Women behind are recognizable as such by their coiffure, the hair ending in two stiff-angled loops as in scene (3) of Ch. xxvi. a. 003, and by long trailing skirts, quite unlike full straight under-robes of men. They cannot be Ministers. Fig. on Śuddhodhana's L. is obviously a woman from her dress; gilded orn. on head shows her to be the Queen. She wears a trailing green skirt and loose brown jacket spotted with red flowers (like the skirt of one of her attendants); lining of her sleeves vermilion with green sprays.

Scene 3. *King and Queen once again* [*worship?*] *Prince* (or perhaps, 'persuade him to return'?). The Chin. char. used is unrecognizable. Ś. and Queen, dressed as in preceding scene, kneel on L. of scene ¾ back to spectator, Ś. on vermilion flower-sprinkled mat, Prajāpatī on his L. hand. Behind them stand two (men) attendants in scarlet jackets and white under-robes, and in R. bottom corner are remains of third fig. (the guide?) in green coat and black-tailed cap. In R. upper corner appears Prince as Buddha seated on a scarlet and white lotus pedestal, with hands folded before him. Behind him circular slate-blue vesica and vermilion halo; on his R. stands disciple, bald-headed, in long dark brown sleeved coat.

Scene 4. *Queen parting from King and entering Back Palace* (i.e. the Women's Part). Ś. is not represented, only Prajāpatī, two women, and the guide. Figs. all walk to L., two above and two below. Queen again distinguished by her head orn., but no trace of gilding remains on it here.

Style and colouring of whole exactly as in Ch. xlvi. 004. Figs. spaced out in same way; no detail in any scene beyond that mentioned, except tree in L. upper corner of each and a smaller one in foreground of (3) and (4). Holes in silk have mostly occurred where green paint was used, i.e. on tree or on women's skirts.
2′ 1″ × 7¼″.

Ch. xlvi. 006. Painted silk banner; all accessories and both ends of painting lost, colour much gone.

Subject: *Samantabhadra* on white elephant, but without attendant. For other examples, see Ch. xx. 001. S. sits cross-legged on lotus, both hands held out from elbow, open and slightly downwards as though bestowing gifts; elephant ¾ R., S. practically facing spectator. Bodhisattva is of type *Ch. 002 in dress and features, but particularly feminine and delicate in aspect, with long level eyes, straight nose, small upcurled mouth, and mild expression. Ears are almost normal in length and have no rings. Elephant drawn with much character and truth to life; colouring, harness, etc., as in Ch. xx. 001; attitude similar but reversed, all six tusks visible.

Colouring almost entirely lost, but traces remain of carmine on S.'s skirt, crimson on under-robe, crimson, black, and yellow on elephant's harness, and crimson, white, and purple on lotuses underfoot. Workmanship refined, and whole group pervaded by air of peaceful and benevolent dignity characteristic of deity.
1′ 10″ × 7⅛″.

Ch. xlvi. 007. Painted silk banner, considerably broken; both ends of painting and all accessories lost; colour well preserved.

Subject: *Scenes from Life of Buddha.* Chinese in style.

Scene 1. *Flight of Prince Gautama* from Palace of Kapilavastu. Shows wall and gate-tower of Palace with two guards sleeping outside. Gate ajar, but Prince flies in cloud over wall, while kneeling divinities in scale-armour hold up his horse's feet. Over latter's neck is seen head of Chandaka, and beside guards are alarm gongs on wooden stand. Armour of little divinities consists of helmet, gorget, and long coat of scales represented by parallel black lines on yellow ground as in case of General, Ch. 00114. They also wear red guards on forearm.

Scene 2. *Pursuit of King Śuddhodhana's Messengers.* Two of these, on black and piebald horses, gallop full-speed from Palace gate. Fig. of one rider completely lost; other carries torch; flame of his companion's torch also preserved. In background Palace wall with red-flowering tree growing over it.

Scene 3. *Examination of the Musicians by King Śuddhodhana* (?). Identification uncertain. Background again Palace wall. King (?) enters on L. riding slowly on white horse with red mane and tail. He is met by palace official, whom executioner and his attendant accompany; latter are taking along in custody two women with hands tied behind. Women unmistakable owing to dress and white complexion with pink cheeks; they seem prob. two of musicians who played to Prince on night of his flight. Cf. scene (2) of Ch. lv. 0011, where four women are seen in custody in same connexion. The rider wears black jacket, red bordered and open at the neck, over an under-robe,

elsewhere only worn by the King or Prince; see scenes (1) and (4) of this banner, and Ch. lxi. 002. His high sq. black cap is, however, the same as that worn by Chandaka in scene (1), and horse has Kanthaka's colours.

Scene 4. *Report of Messengers to King Śuddhodhana.* King sits on R. under sloping roof of open pavilion; five men bow before him, while two officials stand at his side.

Drawing less delicate than in Ch. lv. 009 series, but expressive; deep sleep of guards in scene (1) and rush of horses in scene (2) being vividly represented. Guards, warder, and messengers wear the usual long belted coats, crimson, blue, or yellow, black-tailed caps, and top-boots of Ch. xx. 008, etc.; Prince and King pink or red under-robes and very wide-sleeved black jackets, red-bordered and showing white lining at sleeves and open neck. Executioner, tall and burly, wears crimson robe or mantle leaving R. arm and breast bare, and orange napkin tied over hair and forming a two-eared cap. His assistant wears same sort of cap, and his sleeve is thrown back from arm. Head of executioner's axe almost entirely gone. The official in this scene, and the two in attendance on King in scene (4), wear ample sweeping coats and streamer tied in bow, seen as the Minister's in Ch. 00114. Their hair seems to be done in high top-knot, while Chandaka in scene (1) and rider in scene (3) wear tall sq. black head-dresses; Prince has no covering over his black top-knot. King's head-dress in scene (4) cannot be clearly seen for the pavilion roof.

Architecture as in Ch. 0039, lv. 009 series. Gateway has sq. projecting jambs and lintel, painted dull blue with scroll pattern of palmette type in black in scene (1), and dull green in more elaborate pattern of interlacing scrolls in (3). Wall in this scene also dull blue in diamond lattice-work, lozenges of which are filled with four-petalled flowers of Gandhāra type; but in scenes (1) and (3) it is painted simply in parallel lines of red and light brown. Door itself studded with four horizontal rows of nails, and has ring handle. Buildings in scene (4) are painted red, white, and blue; colouring throughout fairly preserved. A yellow cartouche (blank) for inscr. is placed at side of each scene.

For other representations of the Flight, see Ch. xlix. 005 and lv. 0011; of the Messengers' ride, Ch. xx. 008; xxvi. a. 003; xlvi. 004, and lxi. 002; for the Examination of the Women, cf. Ch. lv. 0011; and for the Report of the Messengers, Ch. xx. 008.

1′ 9½″ × 7¼″. Pl. LXXV.

Ch. xlvi. 008. Dated silk painting with Chin. inscr., representing *Paradise of Amitābha* (?) in simplified form, and donors. Date given in inscr. A. D. 952. Complete with 4″ border and suspension loops of pinkish-purple silk; painting almost intact, but surface worn.

Amitābha sits on Padmāsana, upon railed terrace rising from lake, in midst of company of six Bodhisattvas and four armed Kings ranged close about him on either side. Small part of lake seen in front, but no souls appear in it; no altar, dancer, or musicians, birds, or celestial mansions. Instead of latter, upper end of picture filled by ten small seated Buddhas, representing prob. Buddhas of Ten Quarters of Universe, with narrow inscr. cartouche, almost effaced, by each. So far as legible, these inscrs. seem to contain only salutations to the Buddha.

Central Buddha's pose, dress, and colouring are same as in Ch. xx. 003; the trees, canopy, and attendant Bodhisattvas also of same type and roughly drawn. All Bodhisattvas have their hands in adoration and no distinctive attributes; the Kings wear same varieties of equipment as in Lokapāla banners (see *General Note*, *Ch. 0010).

If presiding Buddha is Amitābha, this the only instance in which the Kings found in attendance on him (see *Ch. 0051). They are of semi-grotesque human appearance; their flesh painted bright orange, that of Bodhisattvas white or pink shaded with orange. But this light colouring and decorative colouring of haloes almost entirely lost. Black used for hair of all figs. is of the curiously dense and gritty character observed in Ch. 00104.

Donors—man kneeling on L. and woman on R. of dedicatory inscr. panel at lower end—on large scale and good examples in dress and coiffure of the tenth-century type, seen also in *Ch. 00102, etc. Man carries smoking censer, woman red lotus bud; behind each stands young attendant, or junior member of family, of same sex. These are dressed like larger figs., except that boy's coat is light green and that he is bare-headed, his hair tied on each side in knot with a free end (as in Ch. 00224, etc.). He holds long-handled screen of flat elliptical shape, as seen also in Ch. 00224; girl carries a casket. For inscription see Petrucci, Appendix *E*, II.

4′ 1″ × 2′ 6″.

Ch. xlvi. 009. Silk painting, representing seated *Buddha*, perhaps *Maitreya*, with donors. Complete with border of coarse red twill (cotton ?), and in fair condition.

Buddha seated European fashion, facing spectator, on low rectang. sitting platform; knees apart and feet resting on small lotuses, but no Padmāsana; hands in *vitarka-mudrā* on either side of breast. Dress usual green under-robe with black border, and red mantle covering both shoulders; hair black, flesh yellow shaded with red; eyes straight and eyebrows very high on forehead; small moustache and beard; circular halo and vesica of concentric rings of dull green and red with flame border, and outer border of white; canopy a conventional flower spray. Donors of type seen in *Ch. 00102: two men standing on R., woman and young boy on L. Latter clad in long trousers, long-sleeved under-garment, and sleeveless top-tunic with slit skirts, held by straps over shoulders and girt round waist; hair like that of children in Ch. xl. 008; lvii. 004.

Dedicatory panel and cartouches blank. Workmanship mediocre and colouring dull.

2′ 1½″ × 1′ 3½″, with border 2′ 6½″ × 1′ 7¾″.

Ch. xlvi. 0010. Painted silk banner with Tib. inscr.; both ends of painting and all accessories lost. Fair condition.

Subject: *Avalokiteśvara.* Stands ¾ L., wrists crossed at girdle, R. hand holding flask, L. pink lotus bud. From same series as *Ch. 00108, and similar in style, colouring, and

workmanship. Fig. broader and more masculine in build. Tib. inscr. the same. 1′ 2½″ × 5⅛″.

Ch. xlvi. 0011. Fr. of painted silk banner with Tib. inscr. All accessories and lower half of painting lost. Fair condition.

Subject: *Bodhisattva*. Upper half only, ¾ L.; R. hand holding up purple lotus bud, L. horizontal at breast, fingers extended and palm downwards; head bowed. From same series as *Ch. 00108; xlvi. 0010; and similar in style of fig., colour, and workmanship. Tib. inscr. the same. 10″ × 5⅛″.

Ch. xlvi. 0011. a. Linen painting with Chin. inscr. showing *Avalokiteśvara* standing. Fair condition; no border. Fig., pose, dress, and emblems as in *Ch. 0052; similar colouring; poor workmanship. 4′ 1½″ × 1′ 7¾″.

Ch. xlvi. 0012. Lower end of painted silk banner, all accessories lost, showing fig. below waist of *Bodhisattva* standing ¾ L. Draperies and style of work as in *Ch. 002. Colours chiefly dull blue, pink, copper-green, pale green, and blue, all fresh. 11″ × 7¼″.

Ch. xlvi. 0013. Silk painting with Chin. inscr., representing *Eleven-headed and Six-armed Avalokiteśvara* (Kuan-yin), seated, with attendants and donors. Date given by inscr. A.D. 957. Made of one width of silk (selvedge to selvedge 24″); border lost; painting almost intact, but exceedingly rubbed and dim.

Pose, dress, and accessories of central fig. generally as in *Ch. 00102; altar, but no tank. Upper hands, R. and L., hold up respectively discs of Sun and Moon, traces of three-legged bird still visible in one, and of tree, hare, and frog in other. Second pair of hands in *vitarka-mudrā* on either side of breast; lower outstretched on knee, apparently open with thumb, second and third finger joined. The eleven heads are treated as in *Ch. 00102, except that Amitābha's head is green; and vesica and halo are bordered with flames.

Attendants consist only of Bodhisattvas; two small ones kneeling in upper corners, and below them on each side two larger ones, upper pair seated cross-legged with hands in adoration; lower kneeling and offering scarlet lotus flowers. Upper pair wear robes and tiaras of type *Ch. 002; lower, like Avalok., 'Indian' arrangement of dress. Short inscr. by each of these.

Lower end of painting contains oblong central panel with dedicatory inscr., 5 ll. rather worn, and kneeling donors, a monk and a civilian on either side, with small girl (?) standing at back on L. In front of four kneeling figs. also narrow cartouches containing inscr., but these are now illegible except in case of civilian on R. Monks nearest the middle. The one on R. kneels on low-legged sitting platform instead of mat, his shoes lying by his side, his R. hand raised with first and second fingers extended, L. hand carrying censer. The other seems to hold front of his gown. Both have shaven heads (painted grey and green) and wear usual monkish robes, grey, yellow, and black lined with crimson or white. Civilians wear same dress as in *Ch. 00102; the child a long skirt and wide-sleeved jacket, her hair done in side-knots with projecting ends as in Ch. 00224. For inscr., cf. Petrucci, Appendix *E*, II.

Colouring chiefly dull crimson, dark olive-green, grey, dark purplish pink, and yellow (on jewellery and cartouches); but almost effaced over whole of picture. Drawing in accordance with usual conventions, but seems to have been rather rude. 2′ 11¼″ × 2′.

Ch. xlvi. 0014. Silk painting representing *Two-armed Avalokiteśvara* (Kuan-yin), seated, with attendants and donors; a simplified form of *Ch. 00102 (q. v.). Border lost and painting broken about lower end, but otherwise in fair condition.

Avalok. sits with legs interlocked on variegated lotus behind large altar; R. hand at his breast in *vitarka-mudrā*, a spray of willow held between finger and thumb; from L. hand below hangs flask. Dhyāni-buddha does not appear on his tiara. Fig., dress, orns., halo, vesica, and canopy are treated generally as in *Ch. 00102, but Bodhisattva's hair is light blue, his eyes slightly oblique; he has a small rippling moustache and imperial, and his flesh is painted glowing pink outlined and shaded with light red.

The attendants consist of two Lokapālas and two small Bodhisattvas, none of whom carry any distinctive attribute. Bodhisattvas seated below, facing spectator, with hands in adoration; head and shoulders only of Kings are visible. Heads are of ferocious type, and wear heavy tiaras and accoutrement as in Lokapālas of banners (see Ch. xlix. 007). Bodhisattvas treated like central figure.

The only unusual feature of picture occurs in two infant boys, who stand on lotuses at either end of altar with hands in adoration. These, perhaps, represent the Good and the Evil Genius, who take the form of young men in Ch. lvii. 004. This is the more prob. as infant on R. has a squint and broken nose, and is evidently intended to represent wickedness in some form or other. They must also, however, have some connexion with the plump and the ugly monk in *Ch. 00102. They have short black hair, are unhaloed, and wear red shoes, short red tunics leaving arms and legs bare, and narrow olive-green stoles.

Colouring as a whole consists chiefly of orange-red, dark green, and some slate-blue, white, grey, and dark pink on ornamental Padmāsana, halo, and vesica. Workmanship coarse.

Dedicatory panel is uninscr. Donors kneeling on either side consist of two men and boy on L., two monks (?) and woman on R. Men and woman wear same style of dress generally as in *Ch. 00102; except that foremost man's hat is in form of black dome-shaped cap with stiff upturned brim standing up close round it (see also Ch. xx. 005), and woman's head-dress consists only of frontal orn. and pins without flowers and leaves. Boy is bare-headed, his hair done in side-knot fashion seen in Ch. 00224; his dress otherwise same as men's.

The two 'monks' on R. may be nuns; they resemble the probable nuns of Ch. 00124 in dress and appearance, and this would account the more easily for their being placed on

same side of picture as woman donor, and in precedence of her. Complexion of all three alike painted here a uniform pinkish white, but without red on cheeks; while men's is a darker flesh-colour. Blank cartouche for inscr. placed before each fig. except boy. 2′ 10″ × 1′ 9½″.

Ch. xlvii. 001. Large silk painting with Chin inscr., representing the *Paradise of Amitābha*. Without side-scenes, but evidently complete except for border, and in good condition. Though retaining the lake and front terrace, this Paradise is unlike others in composition, and drawn in freer style. Inscriptions refer only to details in pictures, and give no date; but see above, p. 885, regarding donors' costume.

Amitābha, Avalokiteśvara, and Mahāsthāma appear seated on stiff, very ornate, lotuses rising directly from a tank; beside each of latter stand two attendant Bodhisattvas on smaller lotuses. These are the only figs. in upper two-thirds of picture, and the attendant groups are placed at some distance from the Buddha. Amitābha closely draped; both shoulders and arms covered; his legs loosely locked, with feet showing on ground. His R. hand is in *vitarka-mudrā*; L. mostly destroyed, but at breast, pulling together his mantle and perhaps holding lotus bud. On either side of him is a carved and decorated post topped by flaming jewel; behind rise stems of two red-flowering trees (also conventionally decorated) supporting canopy orn. with floral scrolls.

Similar trees carrying many-tiered canopies rise over two Bodhisattvas, who sit with legs locked and feet invisible: Avalokiteśvara on L. with hands in adoration; Mahāsthāma on R., L. hand upright in salutation, R. on knee but upright as in *abhaya-mudrā*. The attendant Bodhisattvas have their hands in attitude of argument or adoration, and one beside Avalokiteśvara, a specially graceful fig., holds also scarlet lotus.

At back is a wall of many-coloured marbled blocks, bounding the lake; behind rise two bamboos. Air above scattered with seated Buddhas descending on clouds, souls in form of naked infants floating with outspread stoles, and beribboned musical instruments—harp, lute, flute, and drum. Two Apsaras also, strongly resembling those of the embroidery picture Ch. 00260, sweep down on either side of Amitābha's canopy. On the lake swim pairs of ducks, the emblem of happiness, and oval lotus buds rise enveloping infant souls.

There is no altar, no dancer or musicians, no mansions, and no subsidiary Buddhas; but a sacred vessel is borne on lotus rising from water before Amitābha, and small Bodhisattvas holding scarlet and blue lotuses kneel on either side. In front of them again, on wooden raft or platform level with water, are grouped a two-headed Garuḍa, crane, peacock, duck, and phoenix.

Whole foreground filled by terrace on which appear Bodhisattvas, a pair of half-naked infants, flaming jewels on lotuses, and even the donors on an unobtrusive scale. The Bodhisattvas are only four a side and well spaced. They have no distinctive attributes, but sit with legs half unlocked and hands in attitude of argument or adoration. The infants, almost as large as they, are by rail in foreground, one advancing slowly, other dancing or running, and both holding flowers or berries. Their heads, like those of the infants in sky, are shaved except for two-lobed tuft of hair over forehead and one over each ear.

In the middle a large blank panel for inscription, in slab form with arched top (cf. Ch. liii. 001); the donors kneel on mats on either side, a woman alone on L., two men on R. The woman wears plain brown pleated skirt high under arms, red-flowered buff jacket with long close sleeves, and greenish fichu or shawl gathered closely on the breast. Her hair is done in knot on top and quite plain, as in Ch. liii. 001. The men have long belted coats, and small peaked and tailed caps; cf. Ch. xx. 008, and above, p. 885.

Between lotus-buds on lake and on Garuḍa raft are short cartouches with Chin. inscriptions; a blank cartouche is beside each donor. Inscriptions by the birds are illegible, but the eight beside the lotuses describe the rest taken by the soul in its new life. Nine would have completed the series as set forth in the *Amitāyurdhyāna-sūtra*, Pt. III, which the painting apparently illustrates.

In dress and physical type the figs. resemble those of the other Paradise pictures; the materials of the robes are often spotted with flower patterns. Amitābha's flesh is yellow outlined with red, his hair light grey, with outlines and close curls indicated in black as if copied from statuary; he has no *ūrṇā*. Two chief Bodhisattvas' flesh is also yellowish; that of other Bodhisattvas pink. But the treatment of the flesh distinguishes the painting from all others except Ch. liii. 001, which shares its peculiarities in other respects; for the modelling is indicated by high lights in white, in case of the Buddha no less than the Bodhisattvas. The robes again have only their outlines and the edges of folds painted in solid colour, the remainder diluted, or mixed with white; but apart from the use of white, this treatment is found in a large class of banners.

Background generally dull green, with grey and black for tiled terrace in front; and the colouring of figs. and accessories dull green, light pink or red, and greenish grey, with a good deal of white in decorative parts. There is no black except for hair of Bodhisattvas, and behind tree-tops to show up their pointed leaves. Colours nowhere vivid except in orange blocks of tank wall, and the strong copper-green used for bamboos and for details of dress.

The quiet and coolness of colour and the emptiness of background give an effect of air and space which is lacking in formal crowded Paradises of the *Ch. lii. 003 type. Naturalness of effect is increased by unobtrusiveness of the haloes, which are transparent and often shown only in black outline, and never by solid discs or successive solid rings of colour. The figs. are generally graceful and dignified, the drawing rapid and free, but rough in detail.

5′ 3″ × 5′ 6″. *Thousand Buddhas*, Pl. XI.

Ch. xlviii. 001. Silk MS.-roll cover, complete. Body made of rectang. piece of plain pink silk, backed with coarse paper, and stiffened with wooden strainer at each end. All round a 2″ border of thick figured silk, and at one end are attached three broad bands of same—one in middle

projecting *c.* 8" beyond edge of cover, and one at each side of it converging to meet the first near its outer end. To either end of middle band are sewn tapes of coarse linen for tying up cover when rolled round manuscript.

Down main panel of plain silk, dividing it lengthways into three parts, are also sewn two strips of exceedingly fine silk tapestry. Panel lined with plain pale green silk, and the bands with greenish grey; on either side is stamped the Chin. char. 開 *k'ai* ('open'). A cover of same shape and construction as the cover reproduced in *Shōsōin Catalogue,* iii. Pl. 166; for other examples, more or less fragmentary, see Ch. 00382; iii. 0012; xx. 006; liv. 005.

Its chief interest lies in figured silk of border and bands, which is an excellently woven satin twill, firm, thick, and supple, showing a 'Sassanian' pattern of same type as in Ch. 009. Design consists of alternate rows of large elliptical medallions and smaller panels in interspaces, the latter here taking the form of conventional lozenge-shaped rosettes; outlines are 'stepped' throughout. The elliptical medallions, *c.* 11" in height × 9½" in width, have a narrow inner border starred with small thickened Greek crosses (prob. here only circular spots, whose outline assumes this shape through the stepped weaving), and an outer double ray of pear-shaped petals prob. derived from acanthus leaf.

Within are a pair of confronting winged lions, striding, on palmette base. They have heavy serrated manes made of separate outstanding locks; mouths open; tails hang down to hocks and then turn sharply up, curving in slightly over back and ending in leaf-shaped tuft. Their wings stretch horizontally from shoulder to haunch; head of wing on shoulder represented by large ellipse with spot in contrasting colours at centre. There is a smaller spot also on haunch. The animals are rigid but vigorously drawn. The lozenge-shaped rosettes in interspaces have hexagonal centres bordered by ring of same Greek crosses, and double rays of twelve blunt-ended petals.

General ground pale salmon-pink; ground of elliptical medallions, orange; leaf-border, dark greenish blue and true green; bodies of lions and near legs, creamy buff; off-legs, green; manes, greenish blue; tufts of mane and tail, pale greenish yellow; hoofs, pink or green; outlines of lion-heads, greenish blue; other outlines, pink or green on orange, buff or orange on pink; inner petals of lozenge rosettes, orange and buff; outer, green. All colours much faded, especially orange and pink. The greenish blue does not appear in every row of ellipses, true green taking its place in some, but the frs. are too disjointed to show how it repeats.

Apart from rosettes in spandrels, the silk corresponds almost exactly to a piece in the Victoria and Albert Museum, South Kensington (763. 1893). In this, pairs of confronting lions are found in repeating medallions, and the colouring, texture, and manner of weaving are identical. But the ellipses are compressed from top to bottom instead of from side to side, and their rows are further apart vertically. Between them comes a double row of pairs of long-bodied dogs facing each other across a tree, which takes the place of lozenge-shaped rosette in spandrels. A tree also placed between lions within medallions, and there are other smaller variations which it is not necessary to enumerate.

For a piece of same pattern as the South Kensington specimen, at Sens Cathedral, cf. Chartraire, *Les tissus anciens du trésor de la cathédrale de Sens*, pp. 24 sqq., Fig. 20; also von Falke, *Seidenweberei*, Fig. 140. A manuscript cover showing pieces of identical figured silk is found in M. Pelliot's collection from Ch'ien-fo-tung, and the connexion between it and the Suaire de St. Colombe et de St. Loup is indicated by M. Chartraire, *loc. cit.*, p. 22. For the prob. origin of these silks, see above, pp. 908 sq.

The tapestry strips are hand-made, exceedingly fine in texture, and of excellent workmanship. Width of strips not complete. The design seems to be an adaptation of the enclosed palmette and connecting scroll. The colours are soft and fine, the ground ranging through plum-colour, deep soft blue, chrome yellow, pale green, and creamy white; while scrolls and palmettes contain same colours interchanged to contrast with the ground. For other strips of like make, see Ch. 00300. Main piece of cover 1′ 6" × 11", length to end of middle band 2′ 3".

(Tapestry detail and border) Pl. CVI, (cover as a whole) Pl. CXI, (reconstruction of design of Sassanian silk) Pl. CXVI.

Ch. xlix. 001. Fr. of large silk painting representing *Bodhisattva* (unidentified). L. upper half only preserved, with much broken fragment of fig. and border of light brown silk along top and L. side.

Bodhisattva, approaching life-size, is standing slightly to L., with head turned still further towards same side; R. arm raised from elbow, and hand held out palm uppermost, thumb and second finger joined; L. hand at breast, mostly broken away, but holding long brown staff which rested on shoulder. This may have been begging-staff, and deity in that case might be Kṣitigarbha. Dress and treatment of fig. are in some points unique, though general style is 'Chinese Buddhist' like *Ch. 001, etc. Face long and comparatively thin, finely drawn, with high forehead, straight eye, slightly aquiline nose, and firm well-made mouth and chin.

Eye blue (only instance of this in the Collection); flesh yellowish pink outlined with dark red except line of eyelash, corner of nostril, and dividing line of lips, which are black. On lip and chin moustache and beard seem to be painted in dark red (?), but this part is much discoloured. Details of tiara and top of head are also much obscured, but hair seems to be done in two low blue-black masses dividing to R. and L. behind two wing-shaped ornaments on tiara. Latter has none of usual jewels or streamers, but consists chiefly of these wing orns. with lotus orns. (?) at their base, and a 'Maltese cross' standing up in middle. Behind latter is seen dark brown centre of halo; it is oval, and consists of this brown field surrounded by rings of white, crimson, green, and an outer border of creeping flame. No hair is visible below, but a line of red and yellow scrolled circles appears over R. shoulder (perhaps hair miscoloured).

Dress consists of crimson under-robe coming close up to neck, and over this light green robe tied with white girdle round waist. On shoulders a wide crimson stole lined with

yellow covering upper arm; lower arm wrapped in crimson drapery, prob. sleeve of under-robe. White frills, prob. end of green robe, stand out round elbow. Jewellery comprises only heavy necklace and bracelet, both yellow outlined with red. Small red flowers scattered in background. Painting much dimmed and discoloured, especially down broken side.

For standing figs. of Avalok. enumerated, cf. *Ch. 0088; also above, p. 867. 2′ 11″ × (average) 1′ 5″.

Ch. xlix. 005. Painted silk banner; upper end of painting and all accessories lost; remainder in fair condition.

Subject: *Scenes from Life of Buddha.* Chinese in style.

Scene 1. *Life of Prince Gautama in Seraglio.* In background, on dais within verandahed building, Gautama with Yaśodharā; in foreground dancing-woman performs while two attendants kneel on a mat to L., and on another to R. three musicians play on clappers, pipe, and lute. (For musical instruments, cf. Miss Schlesinger's note, App. *H.*)

Scene 2. *Flight of Prince.* Bounded back and front by section of Palace courtyard wall. In space between, two-storied pavilion from walls of which rises cloud. On this Prince and his horse are carried through mid-air, Kaṇṭhaka's hooves supported on hands of kneeling divinities. Latter wear coats of scale-armour over long robes and have bare heads with top-knots and tiaras. Chandaka not represented. Escape takes place in front of one guard asleep, and behind back of another who looks out over wall. Strong gate-tower of kind seen in Ch. xlvi. 007; lv. 0011, 0016, shown with what looks a closed portcullis; outside it stands captain inspecting three members of guard, who salute with R. hand to head.

Colouring now very dim, but at best was monotonous, consisting only of dull crimson, green, yellow, and slate-blue. Buildings and dress purely Chinese as in Ch. 0039 and lv. 009 series. Prince, Yaśodharā, the dancing-girl, and attendants in scene (1) wear long wide-sleeved jackets and under-robes, or skirts, found in these series; and the musicians, belted coats and black-tailed caps. Attendants and Prince wear high sq. caps, apparently orig. pink or red; and Yaśodharā and dancing-girl have their hair done high above fillet (or comb) in long top-knot forming a sort of four-pointed crest, while their cheeks are painted red. Girl's dancing appears to consist only of movements of arms; cf. the Paradise pictures. Walls painted red and white in horizontal stripes representing stamped clay layers, and have battlements. Most noteworthy point in dress is scale-armour of guard, which consists of close-fitting helmet and gorget joining on to long close coat. This coat is girt under arms and round waist, has sleeves to wrists, and descends to feet. In one instance lower part takes the form of trousers; in others it is obviously a skirt. They carry lances with pennons, and have spikes on top of their helmets. This is the only instance in which the guard are represented in armour, and, the majority of them, awake. Kaṇṭhaka as usual is white with red mane and tail.

Workmanship and composition more primitive than in Ch. lv. 009 series, and expression of movement comparatively poor. Perspective tends to become bird's-eye. A yellow cartouche (blank) for inscr. placed at side of each scene.

For other representations of Flight, see Ch. xlvi. 007 and lv. 0011. Life in Palace not elsewhere represented. 1′ 7½″ × 7¾″.

Ch. xlix. 006. Painted silk banner with Chin. inscr. Much broken; all accessories and large parts of painting lost. Remainder fresh and well preserved; pairs with Ch. lv. 0016.

Subject: *Scenes from Life of Buddha.* Chinese in style; parts of three only preserved. Banner bordered on each side by painted band of red and orange orn. with blue and green quatrefoil rosettes; and divided transversely into three panels by similar bands of green and lilac. Cartouche with inscr. placed on R. and L. sides respectively of scenes (2) and (3).

Scene 1. *Buddha* seated on large scarlet lotus, with legs crossed; R. hand open on knee, L. raised in attitude of protection. Dress: crimson under-robe with light blue lining, covering legs and R. shoulder and arm; brown mantle lined with light green covers L. shoulder and arm. Face sq. and finely drawn, with arched black brows, level eyes, broad nose, and small down-turned mouth; flesh yellowish, shaded with pink. Traces of yellow-green halo behind. No inscr. or cartouche.

Scene 2. *Gautama Buddha as child discoursing on his anterior lives* to civil and military officers. Identified by inscr. on R. side of scene (Mr. A. D. Waley). The child Buddha sits on a verandah of the Palace, holding out his arms and evidently reciting his tale. Two men stand behind him outside verandah, two others on other side of scene. One of latter, in orange belted coat and tailed black cap, kneels on verandah before him holding a roll of paper in his hand; the other stands on ground below, a roll also in his arms. The latter personage is bearded and dressed as the Minister in Ch. 00114, apparently representing civilian dignitary. The other two are not completely preserved, but the nearer to Prince in this case, too, is prob. a servant. He wears crimson belted coat and tailed black cap, and carries in his arms a barrel (?) filled with small round objects, now hardly distinguishable. The other, of whom still less remains, has a tall round black cap figured over in grey (or silver?) tracery, a brown mantle, and white under-robe with green sleeve; he stands erect and grasps what seems from gesture to be hilt of sword. Prince wears bright blue under-robe (paint mostly lost) and pink jacket, and has a white lotus orn. on top of head. He is without halo.

Scene 3. *Archery Contest,* shooting at the Drums. Of inscr. only three chars. remain, and of painting only wing of Palace and row of circular black drums ranged on long wooden stand. Buildings in both scenes are in design and colour like those of Ch. 0039 and lv. 009 series; neither scene elsewhere represented amongst paintings of Collection.

Workmanship is very delicate throughout; drawing fine and clear in the smallest details, colouring gay but not crude, and carefully applied.

1′ 5″ × 6⅘″. *Thousand Buddhas,* Pl. XII.

Ch. xlix. 007. Painted silk banner; upper end of painting with all accessories lost; at bottom, remains of three streamers of dull bluish-green silk. Remainder of painting intact and in good condition.

Subject: *Virūpākṣa, Guardian of the West.* Stands facing spectator on head and raised knee of seated demon; weight thrown markedly on L. hip, R. foot on higher level than L., R. knee bent, and whole R. side relaxed. Sword hangs by R. side, R. hand on hilt (which, however, is not painted in), L. hand grasping R. wrist.

From style of work, as well as from evidence of size, finish at sides, pattern of rhomboids at bottom, and silk of streamers, the banner evidently a pair to Ch. xxvi. a. 006, and belongs to 'Indian' series *Ch. xxvi. a. 007 (see also *General Note*, *Ch. 0010). Dress as in Ch. xxvi. a. 006, but without stole, and on head a tiara instead of helmet; a plain round collar without fastening encircles neck. Scales of armour are not marked on body of coat of mail; oblong scales in skirts appear from shading to overlap upwards. Apron and flaps on hips are of 'green' leather (?) cut in one piece; the former trefoil-shaped.

Skirt clears knees in front, but behind falls to mid-calf, spreading out stiffly at sides; breeches tucked into greaves; shoes plain black. Sleeves fly out widely at elbows, showing white lining; arm-guards are of horizontal bands of red and yellow; greaves also red and yellow with appliqué discs in green. These three colours are the chief used; yellow appearing also on scale-armour and discs of corslet, and metal edging; green on ground of corslet, pleated edge of coat of mail, and ankle-guards; red on collar, border of corslet, hip-belt, and narrow streamers which fly from elbows. Skirt dark pink with blue border.

Face quite square, with level well-opened eyes gazing up to R., strong nose, ears slightly elongated and pierced but without rings, and slight moustache. Flesh shaded with dark pink. Anger is expressed by the wrinkled forehead and biting of the lower lip. Tiara a low solid crown; hair appears above in high top-knot, and falls behind shoulders in heavy mass bound with gold bands. On either shoulder a flaming jewel. Halo has red flame border, and bells above indicate canopy now lost. Demon bald, tusked, and sq.-faced as in Ch. xxvi. a. 006.

Pose of fig. stiff; drawing rather heavy; colour opaque but well preserved except for white, much of which is lost. Yellow cartouche for inscr. to L. of head, blank.

Painting 1′ $5\frac{1}{2}'' \times 5\frac{1}{4}''$, length with streamers 2′ $11\frac{1}{2}''$.

Ch. lii. 001. Painting on linen, in purely Tibetan style, representing *Tārā* with attendant saints and divinities. Preserved complete. Colours laid on solid over coat of white waxy substance which covers the foundation of strong close-woven linen, and originally mostly dark, but rubbed off in places, leaving patches of white or of bare cloth. Canvas of painting stitched on to larger backing of dark green linen, and latter's projecting edges pasted over with bands of dark green silk forming wide frame to picture. At upper end, however, silk replaced by band of light green cotton with strainer and suspension loop.

In the middle Tārā sits on variegated lotus floating on the blue water of lake from which she rose. Foreground, bottom corners, and most of sides of painting are filled with rocky ground breaking down in cliff into lake. On this appear (i) in foreground demonic deity, perhaps Marīcī; (ii) in corners and up the sides, eight additional forms of Tārā, and small interspersed scenes of danger and deliverance, not all intelligible. Blue for sky forms background above Tārā's halo; but it is darkened with heavy clouds on which appear seated Buddhas and saints.

Tārā is represented in her usual form as a beautiful young woman wearing rich dress and jewels of 'Indian' Bodhisattva. She sits with R. knee raised and foot resting on small lotus; L. leg bent across; R. hand resting on knee with palm turned outwards as in *vara-mudrā*; L. at breast, and both holding long sprays of open blue lotus with broad dark green leaves. Her body is inclined slightly to R. (spectator's) and her head leans over R. p. shoulder.

Her jewels include five-leaved tiara with high-peaked crown; her stole and skirt dark red spangled with gilded flowers, and over knees are elaborate ornamental caps of blue, crimson, and green. Whole of flesh has been gilded, but gilding has almost entirely worn off. Her downcast eyes are black, mouth scarlet, hair (seen only round forehead) black decked with scarlet streamers. Head thrown into relief by oval halo of plain black or very dark green; behind fig., oval vesica with field of pale blue and rayed border of crimson, dark green, pale blue, and yellow.

On black cloud above her head sits a small Buddha in meditation, wearing white robe and holding begging-bowl in lap; flesh painted dark Indian red. R. arm bare. On either side of him, on praying mats resting on dark green clouds, sit black-haloed saints in Lamas' peaked hoods—the one white, the other perhaps red, but colour practically gone. These may represent Padmasaṃbhava and Śāntarakṣita.

The eight small Tārās are coloured variously black (1), light and dark yellow (2), Indian red (2), dark grey (1), white (1), and light blue (1). All sit in same attitude as central Tārā, and wear similar dress and orns., carrying in R. hand at knee a flask, and in L. (raised) a long-stemmed blue lotus.

The demon in centre foreground is short and squat, and sits sideways on yellow horse, brandishing a scarlet club in R. hand and holding skull-cap at breast with L. His flesh dark blue, his hair a flaming mass streaming upwards from his forehead; in middle of latter a third eye. A canopy of peacock feathers hangs over his head; and a man's bleeding head hangs from his saddle-cloth. Horse striding over series of pyramidal objects with stepped edges, light blue, black, and dark green; meaning uncertain.

The small scenes placed between the subsidiary Tārās are:

(i) on L. below topmost Tārā: two men sitting in a pavilion.

(ii) one man pushing another head-foremost over cliff edge into lake.

(iii) in bottom corner: one man pursued by snake, another by tiger, a third by some animal indistinguishable. Above,

in lake, a fourth man sails in boat, kneeling with hands in prayer. Boat a sort of barge, wide and flat-bottomed, with double upcurved bows, sq. stern, and cabin on deck.

(iv) in R. bottom corner: animal resembling hog, but with elongated taper-like snout, browsing. Above, a man crossing an unrailed bridge from one point of cliff to another. Long yellow ray of light (?) shed on him from adjacent Tārā, evidently to guide his steps.

(v) above, corresponding to (ii), the man pushed over cliff seen kneeling on lotus under water, flame-circled, with hands in prayer, while his companion looks over cliff-edge in astonishment.

(vi) a magistrate sitting at his desk, and a man standing before him being beaten or having his head cut off by a third.

Dress throughout consists of close-fitting jackets, breeches, and gaiters or top-boots; magistrate and seated men in (i) apparently in long coats. For scenes of deliverance cf. xl. 008; *lii. 003; lvii. 001. Colours darkened by incense smoke.

Painting 2′ 1½″ x 1′ 4″; with border 3′ 4¼″ x 1′ 11″. *Thousand Buddhas*, Pl. XXXI.

***Ch. lii. 003. Large silk painting** with Chin. inscr., representing *Buddhist Paradise*, prob. of *Bhaiṣajyaguru*. Fine example of most elaborate pictures of this type, and in good condition generally, though incomplete at bottom and top. Faded red linen border preserved along latter. Inscriptions refer to side-scenes only (see below, p. 1056).

General Arrangement. The scheme of this Paradise and its fellows is laid on very formal lines; trees, buildings, groups, and even single figs. balancing each other exactly on either side of picture, and all centring round presiding Buddha in middle. Scene laid in elaborate group of railed courts, pavilions, and terraces rising from Lake of Rebirth. In middle is Bhaiṣajyaguru, seated on lotus throne, with a Bodhisattva on smaller throne upon either side, appar. Mañjuśrī on R., Samantabhadra on L. (see Petrucci, *Annales du Musée Guimet*, xli. p. 128). About them a group of adoring attendants—Bodhisattvas, Kings resembling Lokapālas, and demons. Behind the Buddha rise a couple of trees supporting hexagonal canopy of red drapery. Above two chief Bodhisattvas rise canopies of six-tiered umbrella shape, wreathed with cloud; about them float Apsaras on cloud-scrolls. For identifications, cf. App. *E*, III. vi.

Upper part of picture represents the Mansions of the Paradise. It shows a verandahed quadrangle, with large gateway, surrounded by trees and crowned by pagoda-like many-tiered roofs, in middle of front and back walls. Hexagonal towers buttress middle of each of sidewalls, and support open shrines containing Stūpas.

In the upper corners of picture sit Thousand-armed Bodhisattvas—on R. Mañjuśrī, on L. Avalokiteśvara; latter holding usual variety of sacred emblems (see Ch. lvi. 0019, etc.), the former the thousand alms-bowls. This is the only instance in which Mañjuśrī is so represented in Collection. Lower down the sides of picture come two-storied pavilions, the upper chambers of which are open and show small Bodhisattvas sitting on railings, pulling up reed-blinds, and otherwise enjoying the life of leisure. The lower chambers contain only unoccupied Padmāsanas, and have apparently just been abandoned by two subsidiary Buddhas, who advance with their attendants on to two projecting wings of main terrace.

A large platform projecting from same in middle of picture is occupied by draped altar with sacred vessels before Bhaiṣajyaguru, with a kneeling nymph upon either side; and a smaller platform projecting still further into foreground by a dancing-girl, two dancing half-naked infants, and an orchestra of eight seated musicians. From this a smaller court or gangway projects almost to front of picture, a Garuḍa standing in its entrance with widespread wings, and playing on cymbals; along railings all round stand or kneel additional Bodhisattvas.

From lake rise trees, and purple or scarlet lotus buds and flowers, the latter supporting souls reborn. Two of these sit upright, fully developed Bodhisattvas, but with a languid air of newly awakened consciousness; one is represented as a naked infant springing to life from centre of flower; another as an infant curled up in sleep. On the terrace posts sit parrots; and on rocks which edge the lake in front stand a crane and a peacock.

The bottom corners filled by the twelve armed Kings, the generals of Bhaiṣajyaguru, kneeling six a side upon small terraces with gangways sloping down into lake. The painting here is finished off by a band of lozenge diaper in light blue, green, orange, and purple. These lozenge-orn. bands are always found dividing side-scenes from main picture, except in one or two cases where a floral scroll or spot on narrow band of dark colour is used instead.

Below remains upper part of two Bodhisattvas with attendants, central fig. being lost; and beyond, at sides, series of small scenes of miracle. No donors are shown.

Detail. In the mass of detail it is only possible to mention the more important points, especially those common to all large Paradise pictures.

(i) The *Buddhas.* The presiding Buddhas sit always with legs interlocked and soles up, in adamantine pose. All Buddhas wear bright crimson mantles lined with pale blue or green thrown over L. shoulder; and under-robes of green bordered with black, usually covering R. shoulder and arm. Their flesh yellow shaded with orange-red, and their hair grey-blue, except that of subsidiary Buddhas, which is sometimes black. In Ch. 00216 and lv. 0047 their flesh is gilded. Bhaiṣajyaguru here has R. hand in *vitarka-mudrā*, and L. on knee holding the bowl of rice. Standing Buddha on R. has R. hand in *vitarka-mudrā*, L. extended with palm uppermost; Buddha on L. has R. hand in *abhaya-mudrā*, L. before breast. Their faces round, mild, and pensive with eyes only slightly oblique.

(ii) The *Bodhisattvas*, including the two enthroned, are, in this painting, of 'Chinese Buddhist' type in dress, orns., and features (see *Ch. 002, etc.). Their flesh white, shaded with pale pink (now much lost); their hair black; their lips crimson; their eyes and the outlines of their persons black.

Their features drawn with extreme delicacy; eyes in many cases almost straight. All wear shawl-like stoles draping both shoulders; colours of dress applied and shaded with solid tints, and not with transparent washes outlined with solid colour as in banners. Their orns. and all altar vessels and metal trappings of the Kings are painted, not yellow, but dark red-brown picked out with narrow lines of yellow and black.

Of Bodhisattvas immediately attending on Bhaiṣajyaguru, one carries begging-staff, another fly-whisk. The two enthroned are seated with legs slightly unlocked and one foot exposed. The one on L. has R. hand horizontal at breast, L. hand up and out with palm uppermost; the one on R. supports on R. hand dish with lotus bud, and his L. hand also is at breast.

(iii) The *divinities* attending behind them are unhaloed and mostly in armour, two only being Bodhisattvas, who kneel holding blue lotus buds. Immediately behind Bodhisattva enthroned on L. is a personage with youthful features but bearded, wearing above his white fillet a magistrate's head-dress (as of Judges in Kṣitigarbha painting *Ch. 0021), with backward-flying horns on top and a sq. panel in front. On the latter is the Chin. char. 壬. Corresponding to him on R. stands a warrior with three faces (the two in profile of demonic aspect), and a third eye upright in forehead. He perhaps represents Brahman and the former divinity Indra (cf. Ch. lvi. 0019).

Other attendants consist, on each side, of three warriors attired like Lokapālas of banners, and a demon. On L. one of Kings has a dragon coiling round his neck, and another a spotted orange and red gryphon with outspread wings; while the third wears helmet like that in Ch. 0040, but with protective nose-flap. The two first are grotesque in aspect, the last has ordinary human features; demon grotesque and horned. Uppermost King on other side plays on lute, his face framed by jaws of lion-mask helmet, while red disc of sun containing phoenix appears over his R. shoulder. The warrior below him has a white dragon standing on his shoulders, and the lowermost a peacock, while the demon raises a naked infant on his hand. (For the latter fig., see also Ch. 00158, 00373. a.) These warrior and demonic figs. not ordinarily found amongst attendant group.

Smaller Bodhisattvas filling remainder of terrace are of impersonal attendant type, and have their hands in mystic poses, or hold sacred emblems such as the lotus bud, censer, and flaming jewel. About the altar kneel four nymphs holding up sacred vessels; these like warriors, dancer, and musicians are unhaloed.

(iv) *The Thousand-armed Avalok. and Mañjuśrī* in top corners are seated with legs interlocked, and wear striped *dhōtīs* and white shoulder draperies. With his inner hands M. holds light green, blue, or purple bowls, from which rise small seated Buddhas; with the outer he holds plain black bowls.

(v) *The Dancer and Musicians.* Latter sit cross-legged on mats down either side of the dancer's platform. At head of each line, in background, a fat half-naked infant with hair light blue or grey, and scarlet shoes, dancing violently and playing—the L. on a narrow-waisted drum, the R. prob. on castanets.

Adult musicians like Bodhisattvas except that they wear no stoles; they play on L. side, on harp, lute (2), and psaltery; on R. side, on clappers, flute, Chinese reed-organ (teapot-shape), and pipe. Lute is four-stringed with pear-shaped body like the *biwa* of the Shōsōin (see *Shōsōin Cat.*, i. Pl. 56), orn. with inlay and played with plectrum. Reed-organ formed of reeds in pot with blow-pipe attached (see also *Shōsōin Cat.*, i. Pl. 60). Psaltery has oblong sound-chest with strings stretched over it on movable bridges; eight strings are here visible which player twangs with his hands. Clappers made of five thin pieces of wood, cut in shape of sail, and strung together by thong at top, while lower ends are struck together by the hands. Harp large and only partly visible, so that its exact type cannot be seen. Flute and pipe are of classical type. For Miss Schlesinger's notes on musical instruments, see Appendix *H*.

The dancer wears billowy orange skirt tied with green girdle round hips, and close-fitting crimson jacket reaching only to waist, but with long tight sleeves reaching to wrist and studded with metal bosses. Most of jacket covered by metal-bound plastron or collar, beneath which fringe of purple draperies falls to hips. She has a tiara, white knots of drapery at shoulders, and long narrow green stole which she waves in her hands as she dances. Her hair, like that of musicians, is here blue-grey; but it is generally black, and her dress usually less elaborate, the arms and upper part of body being bare except for scarves and jewellery.

(vi) *The Twelve Kings*, protectors of Lokapāla type (see *Ch. 0010), have no distinctive marks. Some have their hands in adoration; others hold sacred vessels or flaming jewel; one carries large dish containing green egg-shaped jewels and branch of the sacred coral. They appear only in this Paradise, and in Ch. liii. 002, both being Maṇḍalas of Bhaiṣajyaguru. For a list of them, see Appendix *E*, III. vi.

(vii) The *trees* in this painting are of four kinds: (*a*) behind Bhaiṣajyaguru the conventionalized Bodhi (?)-tree, with narrow pointed leaves arranged in star-like groups round purple flower. This tree always appears behind presiding Buddha, often behind all three of central triad. Its flowers generally red, pink, and white, but replaced in Ch. xlvii. 001 and liii. 001 by pyramidal fruits. Points of leaves often, however, merged in uniform curved edge, so that each group has effect of green cushion with red button at centre. (*b*) About the pavilions are flowerless trees with plain flat pear-shaped leaves, well separated from each other. (*c*) About the towers, small-leaved trees with occasional small red flowers close to stem, perhaps conventional willows; cf. lvi. 0016. (*d*) Rising from lake, conical flowerless trees with pointed leaves arranged in groups like (*a*) and with sheathed stems like palms. In some of other Paradise paintings, e.g. *Ch. 0051, are flowerless trees with long, narrow, slightly curling leaves, perhaps intended for palms.

(viii) *The architectural setting* is in purely Chinese style, walls painted in white with red woodwork, concave projecting

roofs in blue, green, or black. (See for fuller description Ch. 0039; lv. 009, etc.) Terraces have here a black, but often an ornamental lozenge-tiled, floor; railings of terraces and gangways always of crimson woodwork. Terraces rise on piles, dark crimson or brown, or are built up with blocks of stone orn. with rosettes, etc.

(ix) *Haloes and vesicas* are circular: the Buddhas' made of waving rays of orange, blue, green, and purple; the Bodhisattvas' of plain discs of colour with darker borders, variegated concentric rings of colour, or plain discs covered with an orn. prob. originally representing an open flower. Elongated haloes of Indian type found only in few instances, specially noted.

Both the Bodhisattvas here remaining from some bottom scene have the Dhyāni-buddha on their tiaras. Bodhisattva on L. balances on L. thumb covered metal dish; his attendant plays on lute. That on R. carries on L. hand vase with purple lotus, and with R. hand (lost) trident, while his attendant holds burning lamp on scarlet lotus.

The colouring consists chiefly of soft reds, blues, and greens skilfully balanced and blended so that neither predominates, and held together by black of terrace floor and pavilion roofs; but whole now considerably dimmed. The work throughout is of most highly finished style, the drawing extremely delicate and clear, the pose of many of figs. very graceful.

The *side-scenes*, representing the Eight Calamities (R. side), and on L. side Prayers of Mañjuśrī (?), were to be described and identified by MM. Petrucci and Chavannes in *Mémoires concernant l'Asie Orientale*; cf. Appendix *E*, III. vi.

For another Paradise of Bhaiṣajyaguru with the same side-scenes, see Ch. liii. 002.

6′ 9″ × 5′ 7″. Pl. LVII; *Thousand Buddhas*, Pls. I, II.

Ch. lii. 004. Large silk painting with Chin. inscr.; upper half representing *Amitābha and attendants*; lower, scenes of parental affection and donors. Of lower half L. side and middle are lost, but part of L. side is supplied by Ch. lxi. 008. Sides of main picture, prob. containing legend scenes, also lost. Remainder in excellent condition.

Upper half resembles main group of a Paradise picture, and shows Amitābha seated behind altar, with Avalokiteśvara and Mahāsthāma on either side, four minor Bodhisattvas in front, and at back two monkish disciples and two of armed Kings. Above is a canopy hanging on two star-leaved trees, and a line of pine-clad hills with scarlet clouds clinging to them. Amitābha sits with legs interlocked, R. hand in *vitarka-mudrā*, L. hand at breast holding stemless pink and white lotus bud. Two chief Bodhisattvas hold in their hands nearest him purple lotus flowers in small transparent jars; their other hands are at their breasts.

The lesser Bodhisattvas hold scarlet lotuses, and in dress, orns., and physical type are all of *Ch. 002 type. The monkish disciples haloed; one of mild aspect with white complexion and plump features; the other of red complexion, with semi-grotesque features, emaciated neck, and down of moustache and beard on lip and chin. The Kings also are of red complexion; one with sword, ferocious aspect, perhaps Virūpākṣa; the other without attribute, perhaps Virūḍhaka. Trees treated as in Ch. liii. 001, with whorls of narrow leaves surrounding pyramidal points. Altar shows good example of valance, like Ch. 00278.

Central triad all have small wisp-like beards and moustaches; Buddha's flesh yellow shaded with orange, and his hair grey-blue; flesh of all Bodhisattvas white shaded with salmon-colour, and their hair black. The eyes of the Buddha and all Bodhisattvas white with black pupils and red irises. Colour of robes and accessories consists chiefly of crimson, slate-colour, bright green, yellow, and white, and is exceptionally brilliant and fresh, but harsh in tone; drawing mechanically skilful, but lifeless.

Lower half subdivided horizontally by bend of lozenge orn., and resulting space subdivided again into five (?) vertical panels by long cartouches bearing Chin. inscr.; but large middle panel in each case completely gone.

In upper panels there remain on R.:

(i) Father on sitting-platform instructing his son; and a mother with baby in her arms, accompanied by a nurse (?).

(ii) Part of middle scene (?) now lost. Below, two men, above, three monks, kneeling side by side on mats, with hands in adoration and looking towards middle of picture. A Buddha seated on lotus, with hands in same pose, at end of row of monks. Three inscrs. by these scenes.

On L.: (iii) Pendant to *ii*. Below, two women, above, three nuns, in adoration; male fig. in official dress (like magistrates in *Ch. 0021, etc.) kneeling at end of nuns' row. Below, also, man and woman walking away, but with backward look.

(iv) A father choosing a wife for his son; and a mother sitting with her daughters (?). Three inscrs. by these scenes.

Of donors only parts of two (kneeling) women remain on R., head of one man on L., and parts of four inscrs. Dress of same tenth-century type as in Ch. 00102; liii. 003, but, as shown in only complete woman's fig., peculiarly ornate. Her black mantle powdered with four-petalled red rosettes and triple yellow tendrils; her broad scarf of printed material vermilion, white, and yellow, stamped with scroll and plant motifs in grey and brown. She has a flowered under-robe showing at edge jacket, on neck elaborate necklace of netted red, white, and brown beads. Her head-dress, in addition to long white pins and heavy-metal floral orn. in front, has metal phoenixes flying out on either side and dangling triple chains from their beaks. Her complexion white, with red lips and cheeks; on latter two small patches in shape of birds, while on forehead are painted red flower and butterfly orn.

Dress of figs. in small scenes above is of same contemporary type; nuns' and monks' dress and coiffure of small boy as in Ch. liv. 006. 4′ 5″ × 3′ 3″. Pl. LXII.

Ch. liii. 001. Large silk painting representing prob. *Amitābha and attendants*, with donors. Complete except for corners and border, and in good condition. Simple in design, containing only thirteen figs. besides donors: Amitābha, Avalokiteśvara, Mahāsthāma, six shaven disciples, two smaller Bodhisattvas, and two nymphs. Cf. *Ch. 0051, etc.

Amitābha sits with legs interlocked, R. hand in *vitarka-mudrā*, L. below it at breast, hanging from wrist, with second and third fingers bent up. His mantle, vivid crimson lined with pale green and blue, is wrapped round both shoulders and arms; his flesh yellow shaded with red, which has changed to a curious iridescent mauve giving effect of copper; his hair bright cobalt-blue; small moustache and imperial green.

His Padmāsana raised on high stepped pedestal, its petals pink tipped with crimson, but covered all over with floral scrolls in white, blue, and black. Similar scroll-work adorns base of pedestal, and canopy hanging on two star-leaved trees behind. Stems of latter represented as jewelled poles; their leaves surround conical clusters of red fruit, while an Apsaras floats down on either side, scattering flowers.

Mahāsthāma and Avalokiteśvara sit also on lotuses, crimson and blue, raised on high pedestals. Both have Dhyāni-buddha on front of their tiara; Avalok. has R. hand hanging over knee and L. raised, carrying flaming jewel on palm; Mah. has R. hand upright on knee, and carries pale green alms-bowl on uplifted L. hand.

Behind central triad are ranged six disciples, three a side in ascending tier. They have square heads, and plump solid features with well-opened wide-set eyes and thick eyebrows. Their faces are alert and individual in expression, one smiling. The two at ends of row carry resp. red lotus bud and priest's staff; all wear bright-coloured under-robes and mantles of yellow, copper-green, crimson, or bright blue. The mantles of two are also cross-barred (like Kṣitigarbha's in *Ch. i. 003, etc.), with the same iridescent mauve as appears on Amitābha's face and is seen also on stems of trees. Haloes of all these figs. outlined only in narrow rings of red and white, the interior being treated as practically transparent.

Below the two enthroned Bodhisattvas, on flat red lotuses growing on short stems, sit two smaller Bodhisattvas, in profile or ¾ profile, one holding a red lotus bud, the other a flask. They wear transparent narrow blue stoles, and crimson blue-flowered skirts with blue patches over knees; their haloes are foreshortened and painted as narrow elliptical copper-green discs making a background to their heads. A blank yellow cartouche for inscr. is placed beside each of these and above attendant figs. behind.

There is little yellow elsewhere, as jewellery painted almost entirely in white, blue, and copper-green outlined with red. There is no black except in hair of Bodhisattvas and behind foliage of trees to show up their pointed leaves. The panel for dedicatory inscr. is in form of stone slab with low domed top (cf. Ch. xlvii. 001), carried on back of a tortoise, and covers front of Amitābha's pedestal.

In bottom corners knelt the donors, man and woman, drawn on a small scale. The man, on R., is lost except for top of cap, which shows shape similar to that in Ch. xlvii. 001; the woman, a simple fig. of considerable charm, is complete (*Thousand Buddhas*, Vignette). She kneels on mat, her hands in her lap holding long-stemmed red flower; and wears long crimson skirt high under arms, small white bodice with long narrow sleeves, and a little cross-over shawl in copper-green. Her hair is plainly done in small knot on neck; no orn. but a simple necklace.

Chief interest of picture lies in technique, as the modelling of the flesh is brought out by high lights in addition to ordinary coloured shading. This is most conspicuous in monks, whose high lights are in white on the flesh-pink of their skin. The Bodhisattvas have only ordinary shading in red or pink. Amitābha's high lights seem to be in green, which is most in accord with bronze colouring of his flesh.

The painting strongly resembles Ch. xlvii. 001 (q.v.) in this and other points, such as small number and wide spacing of figs.; the character of Amitābha's trees and canopy with their floating Apsaras; treatment of haloes and donors; and restricted use of black and yellow in colouring. But the drawing of all religious figs. is here more careful and stereotyped, and robes mostly painted in strong solid tints as in ordinary type of Paradise pictures. 4′ 6″ × 3′ 4″. *Thousand Buddhas*, Pl. X.

Ch. liii. 002. Large silk painting representing *Paradise of Bhaiṣajyaguru*; in style and general arrangement like *Ch. lii. 003, but simpler. Bottom lost, extreme top, and scenes down L. side; otherwise in excellent condition.

Pose of central Buddha same as in *Ch. lii. 003; the enthroned Bodhisattvas carry in their hands nearest him resp. scarlet lotus bud in a transparent jar, and a stemless purple lotus bud, and have their other hands in *vitarka-mudrā*. Rest of company consists of four haloed monkish disciples with close-cropped black hair, immediately behind Bhaiṣajyaguru; two blue-haired nymphs kneeling by altar; smaller attendant Bodhisattvas seated on terrace with hands in mystic poses or holding blue or pink lotus buds; a dancer and six musicians (of masculine type but with long Bodhisattva-like hair) in front of altar; two subsidiary Buddhas (incomplete but prob. seated) with their attendants in bottom corners; and six of the Kings (heads only preserved) in centre foreground. There were prob. twelve of latter when complete.

The musicians play on both kinds of reed-organs, lute, flute, clappers, and pipe; see *Ch. lii. 003, v. 001. Peacock stands on gangway before their terrace. There are no infants or birds on lake, which, however, is seen here mainly in background about piles of celestial mansions. These consist here only of high-roofed central pavilion, and two open hexagonal shrines with pagoda roofs, containing small seated Buddhas, and joined to central building by curving gangways which slope steeply down into lake.

Painting is particularly fresh, and colouring distinctive owing to large proportion of black and blue. Black appears in larger masses than usual, being used for floor of main terrace, as well as for hair of majority of figs. The blue appearing everywhere on stoles, haloes, and Buddhas' hair is of peculiar and striking shade between slate and ultramarine. Dull light green is the prevailing colour behind these, besides usual dull crimson of woodwork and robes. There is little white, as flesh of Bodhisattvas is left the natural greenish brown

of silk shaded with red; that of the Buddhas a harsh thick yellow. Drawing refined, and work generally well finished.

The *side-scenes* are uninscr. but correspond to those on R. of *Ch. lii. 003, representing the Seven or Eight Calamities, and are drawn in the same Chin. secular style. Those preserved are: (*i*) Bodhisattva kneeling on lotus before a Buddha (?) on lotus (destroyed). (*ii*) Man and woman seated on either side of tripod caldron; a demon kneeling between them in background, and stretching out hand to woman. In his other hand some unintelligible object; cf. Ch. lii. 003. *x*. (*iii*) Man plunged in water, only head and arms out; as Ch. lii. 003. *vii*. (*iv*) Man sitting on high seat on L., and demon with uplifted stick leading before him by rope a man clad only in long white trousers and a white cloth tied over his head and face; cf. Ch. lii. 003. *iv* and *v*. (*v*) Sick man supported on couch by woman, while two monks read to him from scrolls; as Ch. lii. 003. *iii*. (*vi*) Man kneeling on sitting-platform and leaning forward with his hands on its edge and look of dismay, while a demon rushes up to him with hands outstretched; as Ch. lii. 003. *x*. (*vii*) Man on seat on R., R. hand raised as in blessing, while another with falcon on R. wrist talks to him; cf. Ch. lii. 003. *v*. (*viii*) Man running encircled by pyramid of flame; as Ch. lii. 003. *vi*. (*ix*) destroyed. 3′ 10″ × 3′ 6″. Pl. LVI.

Ch. liii. 003. Large painting on fine linen representing *Paradise of Amitābha (or Śākyamuni?)*, with side-scenes showing legend of Ajātaśatru and meditations of Queen Vaidehī. General conception and treatment as in *Ch. 0051, etc. Much effaced and broken; remains of silk damask border down each side, dark purple patched with another purple and fawn.

Orig. purple damask has design showing Sassanian influence and consisting of circular (?) medallions, *c*. 6″ in diam. and 1″ apart vertically, with disc-spotted borders, and conventional leaf and bud design within. In centre smaller disc-bordered circle; and in interspaces between medallions another conventionalized flower group, not completely traceable. Second purple damask shows Chinese all-over design of wave-like lines. Fawn damask is of lozenge lattice-work pattern, the diagonals formed of chain-like links with small four-petalled rosette at crossings, and larger flattened rosette (also four-petalled) within lozenges. At bottom this pattern goes off into cloud-like border pattern, not completely preserved.

Paradise corresponds entirely in arrangement with *Ch. 0051, having two subsidiary Buddhas in bottom corners, and two short-haired haloed disciples in close attendance on central Buddha. There are also two shaven disciples behind the chief Bvas.

Workmanship has been careful, but drawing is much effaced, and of colour only traces of bright red, besides blue and mauve, remain.

The *side-scenes* represent—on R.: (i) Mount Gṛdhrakūṭa; Śākyamuni not represented; (ii) prob. Bimbisāra and Vaidehī doing homage to Śākyamuni; they appear in foreground waving their arms; upper half of Śākyamuni seen in sky above; (iii) Ajātaśatru pursuing his mother; the minister and physician appear in front; (iv) as in Scene *v*. of *Ch. 0051; subject uncertain. Ajātaśatru (?) on horseback, and a man wearing the cangue led before him by two others; (v)–(viii) obliterated.

On L. Vaidehī meditating on *Sukhāvatī*: (ix) on Sun, and Water (running); (x) on Water as ice (?), a tank; (xi) on the Earth, a green square surrounded by a coping; (xii) on Jewel-tree; (xiii) on jewelled canopy; (xiv) on Flowery Throne, a lotus growing in tank; (xv) on Lake of Eight Virtues, a tank without flowers; (xvi) on Rebirth in *Sukhāvatī*, a soul rising from tank in an opening lotus; (xvii) on Avalokiteśvara; (xviii) on Mahāsthāma; (xix) on Buddha Amitābha; (xx) obliterated.

In L. bottom corner, remains of donors: women with crimson head-dresses, and monks or nuns. 4′ 5″ × 3′ 7″ (with border).

Ch. liii. 005. Large silk painting representing *Avalokiteśvara* (Kuan-yin) standing; no donors or attendants. Complete except for border and extreme top and bottom of painting; in good condition. Fig. untouched, a very fine example of 'Indo-Chinese' type of Bodhisattva.

Fig. stands slightly to L., eyes gazing down, R. hand raised holding willow spray, L. at hip holding flask; no Dhyāni-buddha. Hair, fig., and dress follow Indian traditions, but their original formality is infused by Chinese artist with an air of particular grace and gentleness.

In detail dress and colours are much the same as in *Ch. 0088. Short tight over-skirt is found again, and in same colouring, Indian red, sprinkled with blue and white rosettes. Over it an additional narrow band or cord looped in wide festoons across front and hanging in loops and streamers at sides. One side of this is painted in curved bars of red, white, and slate-blue suggesting rounded surface; other side the same covered with small network of black lines. It is not clear whether this represents a fabric, or some other substance. The long skirt and shoulder draperies are orange, girdle olive-green, scarf across breast Indian red, narrow stole dark chocolate, jewellery reddish brown, hair black, and flesh white outlined and shaded with red.

Face short and round; eyes wide apart and almost level, but with finely recurved line both to lower and to almost closed upper lid; mouth somewhat larger than usual, with tiny moustache and tuft of beard. Halo is circular, outer slate-blue border orn. with a ring of 'enclosed palmettes' in blue and white. Blank yellow cartouche for inscr. on L. upper edge.

4′ 8″ × 1′ 10″. *Thousand Buddhas*, Pl. XXI.

Ch. liv. 001. Silk painting with Chin. inscr. representing *Thousand-armed and Eleven-headed Avalokiteśvara* with attendant divinities and donors. Border gone; also R. top corner, part of R. side, and R. half of bottom of painting with part of dedicatory inscr. and all male donors. Remainder fairly preserved.

General design and treatment of central fig. as in *Ch. 00223, etc. Avalok. here eleven-headed; profile heads

coloured resp. slate-blue and dark green, with black hair. Hair of other heads is slate-blue; those forming pyramid are all of Bodhisattva type, Dhyāni-buddha appearing on tiara in middle of lowest row. Avalok.'s flesh yellow, coarsely shaded with orange-red. The more uncommon emblems of Padmāsana, cloud, bunch of grapes, and fly-whisk, are found amongst emblems of halo; emblem of Sun shows well-preserved fig. of Sun-bird.

Two striding Nāgas, with demonic faces, and small snakes rising from their tiaras, support Avalok.'s Padmāsana as it rises from tank. Other attendants numbered six: Bodhisattvas of Sun and Moon; Nymph of Virtue and Sage; and two fire-headed Vajrapāṇis. But of these, Bodhisattva of Sun and the Sage (who occupied R. top corner and position immediately below) are lost. Miniature Bodhisattva of Moon, with blue and white disc and five white steeds, floats in L. top corner; below her kneels Nymph of Virtue with dish of flowers. She wears 'dancer's' dress, and red-coiffed head-dress as in Ch. iii. 004. Below come contorted and demonic Vajrapāṇis, that on L. blue, that on R. red. Short inscr. is placed by each of them, and by Nymph above.

Of lower end of painting, divided off by band of rosette orn., only L. half remains containing women donors, and central dedicatory inscr. (19 ll. incomplete at bottom, fairly preserved). Women are almost obliterated, but seem to have comprised four grown-up persons and a little girl. From their head-dresses radiate yellow leaves instead of pins; but dress otherwise seems to correspond to that of women in *Ch. 00102. Jacket of foremost is of brown elaborately flowered in red and blue. Part only of black-capped head of one man remains on R.

Workmanship of comparatively rough style and colouring coarse originally. 3′ × 2′ 8″.

Ch. liv. 002. Painted silk banner, complete except for side streamers, slightly discoloured.

Head-piece orig. of painted silk mounted on dark green silk damask (lozenge diaper); later covered with brown silk embroidered with leaves and flowers and backed with green silk. Bordered with terra-cotta silk damask of naturalistic floral pattern, stamped with cloud scrolls in grey-black paste. Whole much destroyed. Four bottom streamers of plain grey silk (discoloured); weighting-board painted with flower design on dark red ground.

Subject: *Dharmapāla Vajrapāṇi*, of Chinese demon type. Attitude as in Ch. xxiv. 001, general treatment and style of brushwork as in Ch. 004. *Dhōtī* bright crimson with slate border; stole dark brown and green; flesh light brown with modelling indicated in pink (faded); plain halo in apple-green; clouds dark pink. Face grotesque, with lumpy forehead and globular protruding eyes, red at socket and with green irises; lipless mouth indicated by single bow-shaped black line; moustache, beard, and whiskers shown by fringe of single curving hairs. Gamboge cartouche for inscr. (blank) to L. of head.

Painting 2′ 1″ × 6⅞″, length complete 5′ 10″. Pl. LXXXVI; *Thousand Buddhas*, Pl. XXIX.

Ch. liv. 003. Fr. of large silk painting showing upper part of Lokapāla, prob. *Dhṛtarāṣṭra, Guardian of the East*, more than life-size. Edges broken all round. Very fine work, the drawing vigorous and the colouring brilliant and in excellent condition.

Preserved portion from bearded chin to hip-belt only, the fig. standing ¾ L. with L. hand outspread at breast holding arrow. Equipment that of the more 'Chinese' of Lokapālas in banners (see *Ch. 0010, *General Note*), but comprises no mantle. It is painted in vivid scarlet, orange, blue, mauve, and green. Borders, straps, discs of corslet, pedestals of jewel orns. on shoulders, etc., are covered with profuse jewel or semi-naturalistic floral ornaments in same bright colours. Scale-armour on shoulders and skirt in large oblong scales; but on body it is represented by small interlacing black circles on a white ground, clearly intended for chain-mail (not elsewhere represented).

Lokapāla wore no helmet, but a tiara, the white streamers of which fall upon his breast; coat of mail finished at top by blue jewelled collar lying back from neck. The finely drawn lips are straight, slightly parted, and painted deep crimson; the sweeping beard black. Flesh is painted a light tawny brown, and behind L. shoulder remains part of green halo edged with flame.

Gr. M. 2′ × 2′. *Thousand Buddhas*, Pl. XXVIII.

Ch. liv. 004. Large silk painting with Chin. inscr., representing *Paradise of Śākyamuni or Amitābha*; with side-scenes showing legend of Kalyāṇaṃkara and Pāpaṃkara, as in Ch. xxxviii. 004. General treatment as in *Ch. lii. 003, etc.; condition good, but middle of picture broken away at bottom. Inscrs. refer to side-scenes only and give no date.

Buddha (Śākyamuni according to M. Petrucci, Appendix *E*, III. vii) has R. hand in *vitarka-mudrā*, L. open on lap; Bodhisattva on R. has hands in same pose; Bodhisattva on L. (with Dhyāni-buddha on tiara) has R. hand also in *vitarka-mudrā*, L. lifted and held out, palm uppermost. Both sit cross-legged facing spectator, with their heads leaning towards the Buddha. The attendant host consists entirely of Bodhisattvas, except for four shaven haloed disciples immediately on Buddha's R. and L. One of these is old and emaciated.

Across top of picture is represented a valance of orange drapery set in black flowered band. In front the dancer occupies her terrace alone except for two Garuḍas; musicians are grouped on two separate terraces in bottom corners, in place of the usual subsidiary Buddhas who are absent. The Garuḍas seem to play on musical instruments, apparently pipe and clappers; musicians, six a side, play on harp, flute, lute, pipe, clappers, and both types of mouth-organ, as in *Ch. lii. 003; liii. 002. Infant souls rise from lake, or float on lotuses upon it; behind musicians rise trees with pear-shaped leaves and groups of conventional pink and white flowers. Architecture of celestial mansions above well shown.

Drawing delicate, especially in features of Bodhisattvas, and workmanship highly finished throughout. The prevailing colours are the usual crimson and dull green, but enlivened

by white colouring of flesh of all Bodhisattvas, dancer, musicians, Garuḍas, and infants, and by orange, pale blue, and purple used on stoles and haloes. The latter and stone foundations of pavilions elaborately decorated; effect of whole gayer than in most of Paradise pictures. Black is used on some of stoles, on roofs of pavilion, and on floor of main terrace making background to chief group of figs.

For inscriptions, and interpretation of *side-scenes*, see Chavannes, Appendix *A*, V. A. The scenes in secular Chinese style throughout, dress of King and Queen corresponding in all essentials to that of Ajātaśatru and Vaidehī in *Ch. 0051 series. Queen's hair, however, done in long crest-like top-knot, like that of dancer's in banner Ch. xlix. 005; the Prince's done in four-pronged fork form seen in case of Prince Siddhārtha in banners Ch. lv. 0011; lxi. 002, etc.

In bottom corners kneel the donors: on R. two men, on L. a woman. The foremost man is bald or clean-shaven, and clad in long purple mantle and under-robe; the other seems of same type, but is mostly destroyed. The woman wears plain purple skirt, and a yellow and red jacket with comparatively narrow sleeves. Her hair is tied on top with plain band, and done in wide flat knot; she has no jewels. For parallel costumes, see Ch. xxxviii. 004, and cf. types of *Ch. 00102, etc.

5′ 9½″ × 4′. *Thousand Buddhas*, Pl. VI; also *J. of Indian Art*, Oct. 1912, vol. xv, No. 120, Pl. V.

Ch. liv. 005. Remains of silk MS.-roll cover, as Ch. xlviii. 001, etc. Rectang. main piece only preserved, of thin silk, with bands of figured silk at end and border of same at sides, and of these the borders are torn away. Silk of main piece an extremely fine damask, red, woven in lozenge lattice-work with clusters of four small lozenges forming rosettes at crossings of diagonals alternately with smaller sq. dots. Ground plain, pattern small twill; very fine regular weaving. Torn and patched at edges with plain dull crimson silk (glazed).

Figured silk is of same weave, pattern, and colouring as Ch. 00171, except that ground is deep blue. Well preserved. Bands at end are lined with yellowish-green silk damask the same as that of main piece except that in the pattern smaller clusters of lozenges take the place of sq. dots.

Length *c.* 2′ 1½″, main piece (incomplete) 1′ 2¼″ × 10½″. Pls. (figured silk) CVI and (pattern of damask) CXXI.

Ch. liv. 006. Silk painting with Chin. inscr., representing *Avalokiteśvara* (Kuan-yin) and two donors. Date given by inscr. August 22, A. D. 910. Broken round edges, but otherwise in excellent condition, and colouring very fresh.

Avalok. stands facing spectator on scarlet and white lotus, which floats on lake or stream. R. hand hangs by side carrying flask; L. is in *vitarka-mudrā* at breast with willow spray held between finger and thumb; Dhyāni-buddha appears on front of tiara. Fig. stiff, with disproportionately large head and short legs, in latter point resembling the more Chinese *Ch. 0088.

Dress and orns. also same as in *Ch. 0088, except for absence of shoulder draperies; but whole treatment more formal, and colouring in bright crude tints solidly laid on. Fig. outlined with light vermilion; flesh painted white shaded with vermilion; hair and borders of garments ultramarine; skirt light vermilion and white; over-skirt and scarf across breast Indian red, former spotted with white rings; girdle, skirt frill, and one side of stole a bright green verging on copper-green; other side of stole very dark purple-brown; jewellery light yellowish brown set with blue and green stones. Eyes almost straight, line of eyelashes drawn black and of eyebrows green over black. Halo a plain disc of shaded green.

On L. (Avalok.'s R.) stands the donor, nun, with close-cropped head painted ultramarine, holding censer; opposite stands her attendant, boy, offering scarlet lotus on dish. Nun's flesh painted white; she wears wide-sleeved yellow under-robe with flowered band across breast, black shoes, and purplish-brown mantle covering greater part of robe and whole of L. shoulder and arm. Boy wears belted long-skirted coat of same dark brown; skirt slit up at side and showing underneath dress of boy in Ch. xxxvi. 001: long wide white trousers half covering feet, short full skirt also white, reaching to knees. His hair is also done in two bunches at the sides with projecting tails, like boy's in Ch. 00224, xlvi. 008, 0013, etc. Both nun and he stand on mats upon water; behind is green land on which grows row of tall bamboos filling background.

The inscriptions consist of: (i) 5 ll. on large white oblong cartouche over nun's head; (ii) 3 ll. on large copper-green cartouche in R. upper corner; (iii) 2 ll. on small white cartouche over head of boy. See Petrucci, Appendix *E*, II.

2′ 6″ × 1′ 7¼″. Pl. LXIX; *Thousand Buddhas*, Pl. XXII.

Ch. liv. 007. Dated silk painting with Chin. inscr., representing *Tejaḥprabha-buddha* on chariot attended by planetary divinities. Date given by inscr. A. D. 897. Apparently was mounted as a Kakemono, the band of purple silk remaining at top, but lost at bottom together with lower end of painting. Latter somewhat broken, but otherwise in good condition.

Buddha sits cross-legged on blue lotus, on open two-wheeled cart drawn by white bullock which is advancing to L. over blue, green, and crimson clouds. An altar with gilded vessels is placed across shafts in front of him; two flags on slanting poles hang out stiffly over back of cart. Buddha has R. hand raised and held out with thumb, third and fourth fingers joined; L. hand rests on ankle. He wears customary greenish under-robe covering R. shoulder, and crimson mantle lined with blue; hair blue; flesh was gilded, but gilding has almost all disappeared. There is no definite halo or vesica, but rays of blue, green, and crimson radiate from his whole person. Overhead draped canopy waving in his advance. The bullock is led by Indian attendant, as is the case of Samantabhadra and Mañjuśrī in banners, but here carrying begging-staff in place of goad. Head of a second bullock appears beyond.

Five planets are referred to in inscr., but the genii of four

only are represented, standing about car. Three of these wear Chinese official or magisterial dress—trailing under-robes, upturned shoes, and wide-sleeved jackets tied with girdle under arms. Two of them stand beyond the car; one in pale blue and white, bearded, carrying a dish of flowers; on his head a high narrow black head-dress within crown of which appears a white boar's head. His companion wears white under-robe and black jacket with gilded girdle; he holds up in R. hand brush, in L. tablet or sheet of paper; his hair done in two stiff loops behind fillet decorated with seven stick-like upstanding orns.; between loops rises a monkey. The third stands in centre foreground playing on lute (for details of instruments, see Miss Schlesinger's note, App. *H*); his robes are white; on his head a phoenix. The fourth in R. bottom corner is of muscular demonic type with fiery hair and grotesque features; he is four-armed, carrying in R. hands arrow and sword, in L. hands trident; on top of his head is a blue horse-head.

Inscr., 3 ll. fairly preserved, on cartouche in L. top corner. For date, cf. Binyon, Appendix *E*, IV.

Colouring chiefly crimson, blue, and green on fawn-coloured background; workmanship good.

Painting 2′ 2″ × 1′ 9½″, with purple silk top 2′ 6½″. Pl. LXXI.

***Ch. liv. 008. Painted linen banner;** one of a set comprising Ch. liv. 009; lv. 0037, and lvi. 0021–2. All are of the same size and in the same style and colouring, and have similar accessories. 008 complete except for weighting-board, clean and in good condition. Head-piece border of bright pink linen; streamers of dark brown.

Subject: *Bodhisattva* standing ¾ L.; R. hand raised holding pink lotus bud, L. raised in *vitarka-mudrā*. Dress and coiffure in 'Chinese Buddhist' style of *Ch. 002, etc. (The other Bodhisattvas in series are in more 'Indian' dress of *Ch. i. 0016.) Hard colouring of orange, yellow, indigo, crimson, and green.

Painting 1′ 5″ × 6¾″, length of whole 3′ 6½″. Pl. LXXXVIII.

Ch. liv. 009. Painted linen banner; one of set enumerated under the preceding. Same accessories, colouring, and workmanship; good condition.

Subject: *Avalokiteśvara* (?) standing ¾ R. with hands in adoration. Dress, etc., as in *Ch. i. 0016; q. v. for general descr. and list of similar banners.

Painting 1′ 5″ × 6¾″, length of whole 3′ 5″.

Ch. liv. 0010. Woodcut on paper, with Chin. text and standing fig. of *Avalokiteśvara* (Kuan-yin). Slender fig. standing erect ¾ L., on lotus upon hexagonal pedestal. R. hand raised holding willow spray, L. by side carrying flask. Dress and coiffure of 'Indian' Bodhisattva, with scarves twined about body and legs. Oval halo covered with floral orn. and bordered with flame. The whole suggestive of bronze statuette. On R. one l. Chin. with epithets of Kuan-yin. Vajra border down each side; wide floral border at top and bottom. Good condition. 11¾″ × 3¾″. Pl. C.

Ch. liv. 0011. Paper painting with Chin. inscr., representing *Avalokiteśvara* (Kuan-yin) seated cross-legged on lotus, hands lying within each other in lap; Dhyāni-buddha on front of tiara. Dress and orns. of 'Indian' Bodhisattva; circular vesica and oval halo; flower spray as canopy above. Coarse workmanship. Colouring only pink and light red (on robes, flesh, and flowers), pale yellow, green, grey on jewellery, halo, etc., and black on hair and outlines.

Salutation to Kuan-yin on cartouche in R. upper corner, and additional inscr. written on background down L. edge stating that donor was a shoemaker; cf. Petrucci, Appendix *E*, II. Good condition. 1′ 5½″ × 1′.

Ch. lv. 002. Fr. of silk painting, with Chin. inscr., showing part of *Jātaka* scene (unidentified). Incomplete; all sides and much broken, but otherwise in fair condition.

Scene preserved shows lotus lake in which stands white elephant holding long-stemmed lotus in trunk. In front grassy ground rising abruptly from lake; upon it are falling headlong with horrible grimaces two muscular, half-naked figs., probably intended for Asuras. They have grotesque bony features, top-knots and beards of light brown hair, and wear stoles and short breeches of crimson, blue, or green, spotted with flowers; also jewellery consisting of ear-rings, armlets, anklets, and bracelets.

The inscriptions contain references to rebirth; but the cartouches (3) are irregularly placed, falling half on ground and half on water of lake; in all cases half falling on water deliberately effaced, along with inscription. Possibly, therefore, these do not refer to this scene at all, but to some earlier Sukhāvatī for which this scene was adapted. For apart from effaced halves of inscriptions there are no obvious signs of previous drawing.

At bottom a detached fr. showing on much smaller scale fine fragment of landscape: stream, flat plain with desolate row of trees, reindeer-like animal feeding, and mountains in background. 1′ 11″ × 1′ 4¼″.

Ch. lv. 002. a. Fr. of paper painting showing part of jewelled canopy and red-flowering trees behind a Buddha, as in *Ch. 0051, etc. Verandah of building in background. Painted entirely in red and brown on buff ground. Rough work. 1′ 1″ × 9″.

Ch. lv. 003. Large silk painting representing *Six-armed Avalokiteśvara*, seated, with attendants. Border preserved along sides and top, but lower end of picture lost, remainder much broken, and painting almost effaced.

Avalok. of 'Indian' type, almost replica of Ch. xxvi. 001, is seated in middle on ornamental lotus rising on scrolled clouds, prob. from tank, but centre foreground lost. Attitude of 'royal ease', with R. knee raised, L. leg bent across, head leaning over R. shoulder and resting on hand of upper R. arm, which again is supported on knee. L. upper hand by head, with third and fourth fingers curled in, others extended; middle hands, L. in *vitarka-mudrā* at breast, R. below it, open, palm up; lower hands, R. hanging down holding rosary, L. lying on Padmāsana by knee, but painted as

a pair of hands in adoration. No emblems except Dhyāni-buddha on front of tiara.

Fig., dress, and orns. those of 'Indian' Bodhisattva (see *Ch. lv. 0014), with flower-orn. caps over knees and twisted pearl-strung rope round neck instead of stole. Flesh originally gamboge shaded with red; hair very light brown. Circular halo and vesica of waving ray, vandyke ray, and petal orn., with inner trilobate flame border, and outer band of white bordered with small lotus orn. as in Ch. xxvi. 001. Between top of this and canopy is a second small fig. of Dhyāni-buddha with attendant disciple and Bodhisattva on either side.

The attendants of Avalokiteśvara comprise:

(i) In four corners, four armed Kings. Only Virūpākṣa (with sword) is preserved complete, in L. bottom corner; and legs of Kings (attributes destroyed) in upper corners. Armour and general type as in banners; see Ch. xlix. 007.

(ii) down sides, eight Bodhisattvas, seated or kneeling, with hands in mystic poses or holding censers or flowers. Majority in 'Indian' Bodhisattva dress like attendant Bodhisattvas in Paradise picture, *Ch. 0051; two in elaborate garments covering them to neck and wrists like dancer in same painting.

(iii) at Avalok.'s knees, two infants naked except for long stoles, floating down on lotuses with hands in adoration.

(iv) below Padmāsana, the Nymph (L.) and Sage (R.) as commonly found in paintings of Thousand-armed Avalok.; see series under *Ch. 00223.

(v) heads of two Bodhisattvas upholding Avalok.'s Padmāsana.

All figs. and accessories, with exception of Avalok. in centre, in 'Chinese Buddhist' style of *Ch. 00223, etc. Colouring chiefly crimson, grey, white, and orange, on greyish background; but almost gone. 4' 8" × 4' 2".

***Ch. lv. 004. Painted silk banner** somewhat broken and faded; all accessories lost.

General Note.—This painting is a good representative of an 'Indian' class further exemplified in Ch. lv. 007, 008, 0029, 0030, 0031; and akin to *Ch. xxvi. a. 007 series. The paintings show many points of resemblance to miniatures of Nepalese MSS., as seen in Foucher, *Iconographie bouddhique*, i. Pl. IV, etc. Style is comparatively primitive, and colouring poor and limited in range. Dull red and green, black, white, yellow, dark brown, and pink are the only colours used; in all, paint much faded and lost.

In pose, physical type, nature, and arrangement of drapery, etc., the figs. are exceedingly like one another even in small details. All are standing, with their weight thrown on one hip, and body inclined more or less strongly to other side. Body itself is slender-waisted; legs thin and straight; face short and round with aquiline nose, arched eyebrows, and long narrow but almost straight eyes.

The dress consists of a skirt, draping fig. from waist to ankles and drawn closely about legs so as to show their form. It is usually of transparent material, striped or spotted, beneath which are seen short *laṅgoṭī* of thicker texture. Round hips girdle of drapery and leather (?) belt of several thongs, usually with clasp in front to which girdle is attached. Narrow stole crosses breast from one shoulder, leaving whole upper part of body practically nude, and descending in stiff spirals and waves about arms to ground. A still narrower double or triple band of green set with diamonds (?)—and found only in paintings of this type—hangs round neck in loop to about knees. Jewellery massive in form, and comprises, besides usual bangles, necklace, and tiara, anklets and elaborate armlets on upper arm. Tiara and armlets set with distinctive ornaments, either of high triangular shape richly chased, or in form of tall spike set with jewels.

Hair done in high cone on top of head, and falls in loose black ringlets on shoulders. Flesh is painted in characteristic Indian fashion, green, red, or white according to deity represented. The halo is always oval, formed of rings of variegated colour and bordered with flame; underfoot a single lotus. Variations in detail are noted under separate descriptions. Blank inscr. cartouches are placed on L. upper edge. Paintings when complete show tasselled canopy above, and band of yellow rhomboids filled with rosettes below.

Ch. lv. 004. Subject: *Avalokiteśvara.* Fig. stands facing spectator, weight thrown on R. hip and body inclined to R. (spectator's); R. arm bent up at elbow with open hand upraised; L. extended by side carrying long-stemmed pink lotus. Head inclined to L., eyes gazing down. Nose broad and mouth wide. Row of short curls on forehead. Skirt of transparent white stuff, *laṅgoṭī* green, stoles of dull buff and pink gathered in knot on R. hip by clasp. Double-collar necklace and elaborate tiara. Flesh painted throughout light red. 1' 6" × 6¾".

Ch. lv. 005. Painted silk banner, both ends and all accessories lost. Remainder much faded and discoloured, but shows fig. intact from crown of head to knees.

Subject: *Dhṛtarāṣṭra, Guardian of the East.* Stands slightly R., bow in lowered L. hand, arrow (incomplete through fading and neither end visible) in R. From colouring and style of work evidently belongs to 'Indian' series *Ch. lv. 004, which otherwise (as preserved to us) contains only Bodhisattvas. Dress as described in *General Note*, *Ch. 0010, and in Ch. xxvi. a, 006.

On skirts and shoulders scale-armour outlined red on buff (much faded); but on body no scales marked and coat painted plain green. On shoulders are flaming jewels on short lotus stems as in Ch. xxvi. a. 006. Apron below hip-belt and flaps over hips are cut in one piece, of dark pink leather (?), apron being trefoil-shaped. Arm-guards also of plain leather, painted with disc pattern in shades of dark pink, and finished at top by stiff outstanding green ruff like the usual ankle-guard, corresponding to green pleated edge of coat of mail on upper arm. Sausage-shaped collar protects neck. On head a solid gold and jewelled crown, which allows the black hair only to be seen in festooned edge on forehead.

Face, with its conventionally twisted eyebrows, wrinkles over nose, and round glaring white eyes, tends to monster type, but features otherwise are human. Ears elongated and pierced, but without rings; mouth wide and compressed, with

broad moustache and small pointed beard; fingers curved and tapering. Apart from colouring already mentioned, green and red are the only tints used, on skirt, stole, corslet, and borders, besides yellow on metal-work and orns. Whole very dim.

$11\frac{3}{4}'' \times 7\frac{1}{8}''$.

Ch. lv. 006. Painted silk banner; complete, and (except for head-piece and side streamers) in excellent condition.

Painted silk centre of former is much broken, but shows volute of light blue leaves curling from central stem and surmounted by terra-cotta and green leaves and dark pink flowers on a red ground. Binding of fine bluish-green silk, and side and bottom streamers of same, now faded. For suspension loop, see Ch. 00297. Weighting-board painted on dark red ground with open lotus between spreading buds and leaves; flowers dark pink with black-centred petals; leaves dark green with outlines, veins, and scrolls in yellow.

Subject: *Bodhisattva* (unidentified), in attitude, dress, face, and accessories same as *Ch. xvii. 001; see also Ch. 00142. He stands, however, upon single lotus; petals coloured in pairs from centre bright blue, scarlet, green, and purple. Mantle caught by clasp and fastened up to L. shoulder by white thread. Ears normal in length and not pierced; face very carefully drawn and finished.

Colouring very bright and well preserved, but harsh and opaque. Under-robe strong gamboge yellow with folds painted in red and border light blue; mantle dark maroon (not barred), with lining of light pea-green; lotuses and tassels of head-dress purple and scarlet. Circular halo has light blue centre and outer band of copper-green separated by rings of scarlet; same series of colours repeated in canopy above. Valance at top is hung with bells, and shows pattern of repeating elliptical rosettes, shaded purple on purple ground, alternately with lozenge-shaped 'spots' of foliage in light green and blue. Gamboge cartouche for inscr. to L. of head, blank.

Painting $2' 2\frac{3}{4}'' \times 6\frac{7}{8}''$, length of whole 6′ 1″. Pl. LXXX.

Ch. lv. 007. Painted silk banner, of 'Indian' type as *Ch. lv. 004. Considerably broken, and all accessories lost.

Subject: *Bodhisattva*, perhaps Avalokiteśvara. Fig. stands almost full-face, weight thrown on L. hip, L. shoulder slightly drawn back, and head turned over R. shoulder. Hands placed together at breast, supporting flaming jewel. Skirt of transparent white stuff spotted with dull red, over pink *laṅgoṭī*; stoles of dull red and green. Remains of yellow paint on face, which is of finer type than in *Ch. lv. 004, with long aquiline nose and arched eyebrows. No curls on forehead, but loop of hair before ear; feet broken away. $1' 4'' \times 7\frac{1}{4}''$.

Ch. lv. 008. Painted silk banner, of 'Indian' type as *Ch. lv. 004. Silk cracked; upper end of painting and all accessories lost. Subject: *Bodhisattva Vajrapāṇi*. Fig. stands on dark pink lotus, legs full-front to spectator, body thrown slightly backwards to R. and face turned $\frac{3}{4}$ L. R. arm bent up at elbow, supporting the Vajra, upright, on open palm. L. hand also raised, palm out, thumb and forefinger joined. Skirt striped green and dark pink, clearing ankles; *laṅgoṭī* red; girdle dull yellow, passed loosely round hips and knotted in front; stoles of dull buff and red. Face very like that in Ch. lv. 007, but with small ringlet before ear. Flesh painted green throughout, with palms of hands and edges of soles of feet red. Fig. from waist up disproportionately small. $1' 6'' \times 7\frac{1}{8}''$.

Ch. lv. 009. Painted silk banner; both ends of painting and all accessories lost, but otherwise, with its companion Ch. lv. 0010, one of the best preserved banners in Collection.

Subject: *Scenes from Life of Buddha*; purely Chin. in style. Banner defined at edges by painted border of chocolate brown, and divided by transverse bars of same into four sq. panels.

Scene 1. *Meeting of Gautama Bodhisattva in a former existence with Dīpaṅkara Buddha.* In open country with mountains in background (mostly destroyed) Dīpaṅkara advances towards R. attended by two Bodhisattvas. The boy, afterwards Gautama Buddha, stands bowing before him with hands clasped, and Dīpaṅkara touches his head with L. hand. His R. hand is raised in *abhaya-mudrā*. The boy wears a short deer-skin tunic, is bareheaded and short-haired. Dīpaṅkara's flesh is painted pale yellow, his under-robe bright copper-green, his mantle deep crimson with grey lining. Lotuses appear under his feet, and circular halo behind his head; but the Bodhisattvas are without halo and without jewellery. Otherwise their dress and coiffure are of usual Bodhisattva type, as in *Ch. 001, etc.

Scene 2. *The Four Encounters.* This scene is chronologically out of place in banner. In foreground are two hills; on the one to L. the *sick man* is sitting up on low trestle couch, propped by an attendant in white coat and black-tailed cap. Sick man naked except for crimson cloth covering his legs. Behind couch the *old man* advances, accompanied by boy-attendant in copper-green. From his attitude he is obviously leaning on stick, which has not been painted in. Dressed in long belted white coat and black cap and hood, falling on shoulders and closely framing face, exactly as in Ch. lv. 0016 (q. v.). On hill to R. lies the *corpse* on its back, naked except for loin-cloth and painted dark brown. From close beside its head curling cloud rises in air, and on this, with hands clasped, kneels fig. in belted coat and black-tailed cap of the common man (see Ch. xx. 008, etc.). His back is to spectator; he is gazing at a palace in Chinese style, which also rests upon clouds and fills the upper half of the panel. Four large elliptical spots of dull green appear resting on slopes of the roofs, prob. foliage of trees not completed. Kneeling fig. on cloud prob. represents the soul of the dead man;[1] and building, being also on clouds, some heaven or home of the dead. There is no sign in scene of Prince Gautama, or of ascetic with whom he had the fourth Encounter.

[1] Cf. exactly similar device in illustration of this scene by a Chinese artist, dated A.D. 1808, in Wieger, *Vies chinoises du Buddha*, Appendix I, no. 26.

Scene 3. *Descent of Gautama Bodhisattva.* Here is shown a court of palace of Kapilavastu. In L. bottom corner green rush-blinds of a projecting wing are rolled up, showing Māyā wrapped in a crimson robe and lying on R. side asleep upon a couch; for Māyā's position on R. side, which does not accord with tradition, cf. Foucher, *L'art du Gandhâra*, i. p. 293. Over palace roof appears infant Bodhisattva kneeling with clasped hands on back of white elephant, which gallops towards Māyā with legs outstretched. The Gautama has fig. of baby and is painted white, naked except for white loin-cloth; behind fig. and head, haloes drawn in outline. Two kneeling divine figs. without halo accompany him. Whole visionary group contained within circular space unpainted, and its passage through air marked by trail of cloud, red, blue, and yellow.

Scene 4. *Return of Māyā to her father's palace.* Māyā, distinguished by disc-shaped gold orn. upon her head (which marks her also in companion banner, Ch. lv. 0010), is seen walking with woman attendant from palace of Kapilavastu, a corner of quadrangle of which fills R. upper corner. Immediately behind her small sq. pavilion or shrine (?) with tapering tee of Chattras. Both women wear ordinary Chin. women's dress of long robe and wide-sleeved over-jacket, tied in under arms, in which they muffle their hands. Attendant's dress is orange and blue, Māyā's crimson and copper-green. Lower edge of scene lost.

Painting purely Chinese in workmanship and type of architecture, dress, etc., represented. With its companion it is one of the most characteristic of the more finished of Buddha Legend banners.

Buildings are long and low, painted white, with red poles and shutters; outside verandah raised a few feet above ground and built up by slate-coloured wall. Roofs are gabled, with long upcurling eaves, and painted a deep Prussian blue. Secular dress where found accords with Chinese type.

The women's coiffure in scene (4) is characteristic, the hair being done in forked top-knot at corner of head, and ends turned in at nape forming heavy roll round neck. In Māyā's case no top-knot is visible, being prob. dispensed with owing to orn. Their flesh is painted white, while men's is flesh-pink. Straight wisp of hair falls before ear in case of divinities and humans alike.

Drawing done in neat fine pen strokes; colouring carefully painted in in strong clean but opaque and somewhat crude tones. Chief colours used are a rich crimson, deep Prussian blue, orange, yellow-green, copper-green, and slate. Painting of details not entirely finished; e.g. a lattice-work fence and trees in background of scene (4) are traced only, and tracing not strengthened by subsequent ink lines as is the case of all figs. and principal architectural details.

A yellow cartouche (blank) for inscr. lines side of each scene, alternately on R. and L.

For another representation of the Encounter, see Ch. lv. 0016, and of Descent of Buddha, Ch. 0019, 0039. Scenes (1) and (4) are not elsewhere represented.

1′ 11½″ × 6⅜″. Pl. LXXIV.

Ch. lv. 0010. Painted silk banner, with Chin. inscr. Companion to Ch. lv. 009 and in same excellent condition, except that parts of top and bottom scene are lost.

Subject: *Scenes from Life of Buddha.*

Scene 1. *Divinities* (?) *adoring the unborn Buddha* (?). Māyā is shown asleep on couch as in scene (3) of the preceding; in L. bottom corner appear three figs., kneeling with hands in adoration. They wear Chinamen's dress of long-sleeved jacket and under-robe green, orange, and crimson; their hair done in top-knot; their heads without haloes like those of attendant deities in scene (3) of Ch. lv. 009. The cloud on which they kneel shows them to be a vision.

Scene 2. *Māyā on her way to Lumbinī Garden.* M. sits in open palanquin carried by four bearers, who advance with long strides towards gate of garden, visible in L. bottom corner. Two other men carry trestles on which to set palanquin down. They are passing over high open ground, from which is seen in background long low-lying plain. Bare mountains fill horizon, and in middle distance to L. are wood-crowned hills. Palanquin surmounted by gay red and green canopy culminating in fig. of phoenix; crimson streamers hang at the corners.

Scene 3. *Birth of Buddha.* Scenery like that of previous scene, but disposition reversed. On high ground in front grows a single tree, under which M. stands with R. arm stretched up grasping a bough. Through mouth of her wide-hanging sleeve the infant springs downwards, arms outstretched. A woman attendant (prob. Prajāpatī) kneels to receive him, holding out a blue cloth, on which a white lotus appears where he is about to fall. Two other women stand behind M., one holding her L. hand; all wear Chinese women's dress.

Scene 4. *The Seven Steps.* This scene alone bears an inscription, which confirms its identification as above. Most of background lost, but scenery was that of preceding scenes. Cracks across middle are sewn together with white and red silk. To R. stands Māyā, her hands muffled in her long sleeves, head turned back towards middle of group; to L., two women attendants with bowed heads and hands raised in wonder or adoration. In centre, infant Bodhisattva steps forward, L. arm upraised, four scarlet lotuses lying behind him, and two beneath his feet. He has here fig. of young child, and wears a white *dhōtī*.

Style of whole identical with that of Ch. lv. 009. The men in scene (2) are clad in long white trousers; coats of white or pale yellow tied in at waist, with long skirts or tails, black shoes, and black-tailed caps. Dress and coiffure of M. and her women are the same as in lv. 009; their faces and hands painted white. Colours used for their dress are grey, orange, crimson, copper-green, and blue; and in scene (3) M. also wears a deep white belt, pleated vertically from top to bottom and covering body from arm to hips. The landscapes in the background are painted in various tints of grey and greyish green, and form one of the great charms of the banner, giving an extraordinary effect of width and distance. As in Ch. lv. 009, all details are not painted in; e.g. gate of park and uprights of palanquin in scene (2).

For other representations of the Birth or the Seven Steps,

see Ch. 0039, 00114; xxii. 0035. Scenes (1), (2) not elsewhere represented.

1′ 11½ × 6⅜″. Pl. LXXIV.

Ch. lv. 0011. Painted silk banner; all accessories lost and both ends of painting, otherwise unbroken and in excellent condition. Pairs with Ch. lv. 0012.

Subject: *Scenes from Life of Buddha.* Two scenes, Chinese in style. Bordered each side by painted floral band showing alternate halves of large conventional rosettes in orange, blue, and light green on black ground; across top draped valance, blue and white, fringed with bells.

Scene 1. *Flight of Prince Gautama from Kapilavastu.* Shows part of palace courtyard, enclosed by high blank walls with battlemented top and strong gate-tower as in Ch. xlvi. 007; xlix. 005, etc.; gate shut. Within court four women sit or recline—one with a harp of type found among Shōsōin treasures at Nara (see Petrucci, *Gazette des Beaux-Arts*, 1911, p. 208; cf. also Miss Schlesinger's note, App. *H*) before her, one with a lute; outside gate, two guards: all are in attitudes suggesting deepest sleep. Wreath of cloud, rising from palace over courtyard wall, carries with it the Prince, now far away on his white horse. With him is Chandaka on foot. In background fringe of mountains, dark green and blue, covered with forest.

Scene 2. *King Śuddhodhana examining women and guards* (?). On L. sits Ś. on low dais, his umbrella-bearer behind him, and Minister or official carrying a roll of paper upon each side. A third seen in foreground going to join group behind; all are bearded. In front of Ś. bow four men in long pink voluminous coats like Ministers, but with smaller head-dresses or top-knots, and clean-shaven. Their hands are behind backs. On King's L. a row of four women in same position, two gaolers with beating-sticks over their shoulders standing behind them. They are evidently four musicians who slept while Prince escaped: cf. scene (3) of Ch. xlvi. 007. Scene takes place on open ground behind range of tree-dotted hills. The four bowing men may represent guard, being examined by King; for their air and position suggest that they are in custody like the women.

In design and workmanship the banner is a fine example of Chinese style. The dress and head-dresses of Chandaka, musicians, guards, and gaolers are the same as in Ch. xlvi. 007; lv. 009, etc.; the Ministers' as in Ch. 00114, but without trailing sash. King's dress like theirs, but his jacket is black and his head-dress flat-topped. Prince's head is bare, and his hair done in the four-pronged shape seen in Ch. xlvi. 004; lv. 0012, and lxi. 002. Colouring quiet, consisting chiefly of dull green, crimson, brown, grey-blue, and some orange. Drawing life-like, and attitudes of sleeping figs. specially expressive. The musical instruments are of same type as those in orchestra of Paradise pictures, e.g. *Ch. lii. 003.

A yellow cartouche (blank) for inscr. is placed on each side of upper scene, and an orange one in middle of the lower.

For other representations of Flight, see Ch. 00518; xlvi. 007; xlix. 005; and for scene (2) cf. scenes (3), (4) of Ch. xlvi. 007.

1′ 8″ × 7″. *Desert Cathay*, ii. Pl. VI.

Ch. lv. 0012. Painted silk banner; all accessories lost, but painting in perfect condition; pairs with Ch. lv. 0011, and has the same floral border.

Subject: *Scenes from Life of Buddha.*

Scene 1. *Farewell of Chandaka and Kaṇṭhaka.* To R. on low rock sits the Prince, his hand raised in farewell. On L. under overhanging cliff kneels Chandaka on one knee, grasping Kaṇṭhaka's bridle with R. hand. His L. hand wrapped in large sleeve is raised to his eyes. Kaṇṭhaka kneels on his fore-knees with head lowered to ground. He is, as usual, white with red mane and tail. Behind broken rocky ground sloping down to lake, beyond which range of high blue peaks.

Scene 2. *Cutting of the Hair.* Among precipitous mountains, whose tops are scantily clothed with trees, the Prince sits on low rock, one hand pressed to either side of his head, which he bends forward. Before him two divinities, the principal of whom advances to him, uplifted razor in hand, while attendant joins hands in worship. This form of legend found in Chinese version of Abhiniṣkramaṇa-sūtra; see Beal, *The Romantic History of Buddha*, p. 144. Five smaller figs. kneel as spectators in foreground, with clasped hands.

Scene 3. *Life of Austerities.* Gautama is seated alone in meditation, on a low rock on open hill-side. His body and arms naked and emaciated.

Style and details of painting entirely Chinese, and correspond to those of Ch. lv. 0011. In first two scenes Prince's dress consists of long white under-robe and brown over-jacket with black collar and voluminous sleeves edged with black; his hair strained up to top of head and done in four curious upright prongs like those of a trident; see Ch. lv. 0011; xlvi. 004 (sc. 2), and lxi. 002. In scene (3) he wears only red robe about legs; on his head a prickly green mass like a thorn-bush. Beneath this his hair is visible, cropped short but not shaved; the green prob. represents leaves said to have fallen on his head from trees, though trees are not shown. The hair-cutter in scene (2) wears same dress as Minister in scene (2) of Ch. lv. 0011; the attendant divinity wears dress of Bodhisattva—trailing *dhōtī*, girdle and stole, but no jewels. Hair of both done Bodhisattva-fashion in top-knot and long locks down back; that of hair-cutter decked with white flowers. Chandaka and kneeling figs. in scene (2) wear usual long belted coats of crimson or brown, and close-fitting black caps with tails. None of figs. have haloes.

Colouring consists chiefly of greys and greens, with a little dull crimson and brown and touches of black. The scenery, with its craggy cliffs, steep mountain slopes, and deep valleys, gives fine impression of space and grandeur for smallness of scale. Two cartouches (yellow) are placed on edges of scenes (1) and (2), and two others (orange) are inset in scenes (1) and (3); all blank.

For other representations of Farewell of Chandaka, see Ch. xxvi. a. 003; lxi. 002; for Life of Austerities, cf. Ch. xxvii. 001. Cutting of the Hair not elsewhere shown.

1′ 10″ × 7¼″. Pl. LXXV.

Ch. lv. 0013. Fr. of painted silk banner, retaining one bottom streamer of blue silk with leaf design traced in yellow.

Subject: *Bodhisattva.* Lower half of fig. only, standing on red lotus facing spectator. Dress and painting of type *Ch. 002. Colouring chiefly pink, light green, and red fairly preserved.

Painting 1′ 1″ × 6½″, length with streamer 2′ 8″.

***Ch. lv. 0014. Painted silk banner** in 'Indian' style, with triangular head-piece, streamers, and weighting-board complete. Bottom streamers and border of head-piece of plain cinnamon silk; side streamers and interior of head-piece of dark brown silk; painted silk covering latter almost completely destroyed. Weighting-board green, with design of five-petalled flowers, red, white, and yellow on white grounds. Two Chin. chars. on border of head-piece.

Subject: *Bodhisattva* (unidentified) with rosary. Fig. stands stiffly facing spectator on single white lotus tipped with dark pink. R. arm hangs by side carrying rosary; L. held before breast, palm up, second and third fingers bent. Fig. very broad across chest and shoulders and curving in to slender waist. Robed from hips to ankles in grey discoloured skirt, raised in symmetrical folds at middle and sides by girdle. Latter, dark pink lined with white, is draped loosely round hips and knotted in front, whence ends fall between legs. Waved edge of skirt-folds round ankles allows red and yellow inner side of stuff to be seen. Narrow stole of green and Indian red on reverse sides passes round shoulders and thence winds stiffly about arms towards ground. A narrow scarf of Indian red lined with grey passes across breast from R. shoulder, and behind shoulders hang bunches of pink drapery reaching to elbows.

Jewellery comprises tiara, plain ear-rings, necklace, bangles, and armlets, three last being set with red and grey jewels. Tiara consists of gold circlet, set with three high gold ornaments—each formed of three circular gold plaques or balls of diminishing size, set one upon another, the smallest on top —with white fillet of drapery behind and red lotuses at ears.

Face full and impassive, with straight eyes, arching brows, small mouth, and elongated ears. Hair, black, done in double-leaf form on top of head and falls in thick spreading mass behind shoulders. Flesh painted throughout a strong hard yellow, thickly laid on, outlines being dull red.

Outlines of drapery black, in many places blurred or insufficiently filled in. Circular halo of rings of green, red, black, and white. Painting bounded below by decorative band of rhomboids, red, green, and yellow, and at top by painted valance.

Style of work primitive. Forms of body heavy and comparatively shapeless, drawing of hands alone showing something of delicacy which marks the more Chinese of paintings. Colouring is muddy and coarse, recalling that of Nepalese paintings, Ch. lvi. 001–0010, though this banner is of considerably better workmanship. For other examples of the same style, see Ch. 0017; lv. 0032, 0034; cf. also series *Ch. lv. 004. Painting 1′ 9″ × 7″, length complete 5′ 5″.

Ch. lv. 0015. Painted silk banner; all accessories lost; painting almost intact and in fair condition.

Subject: *Rebirth of souls from Lake Sukhāvatī.* At bottom is seen surface of water, with palisade in front. From this rises lotus plant, which curves alternately to R. and L., bearing at each curve an opened flower on which sits a celestial fig. robed as a Bodhisattva. Three of these appear on R., two on L., and in L. top corner, on small newly opened pink lotus, a naked infant dancing. Dress of seated figs. is that of 'Indian' type of Bodhisattva (see *Ch. lv. 0014) but without stoles; and their faces are short and square with straight eyes. They sit cross-legged, except the lowest, who kneels on one knee; two have their hands in pose of adoration, others rest R. hand on knee or have both hands raised with fingers in mystic poses whose meaning is not known. The lotuses are painted yellow and red, pink and white, or green and white, and same colours are combined for robes and haloes. Latter are oval and painted in rays or in petal pattern. Infant painted white, with red shoes, necklace, cheeks, and mouth. Colouring throughout coarse and dull, and drawing somewhat rough.

For another representation of same subject, see Ch. xl. 001. 1′ 7¼″ × 7⅝″. Pl. LXXXIII.

Ch. lv. 0016. Remains of painted silk banner, with Chin. inscr.; companion to Ch. xlix. 006. Incomplete top and bottom, and considerably broken; all accessories lost; part preserved fresh and clean. Pairs with Ch. xlix. 006.

Subject: *Scenes from Life of Buddha*; two preserved. Border and dividing bands of scenes as in Ch. xlix. 006. Inscribed cartouche on R. and L. side resp. of each scene.

Scene 1. *Encounter of Prince Gautama with the Old Man.* Identified by inscr. On L. appears battlemented palace courtyard wall, with sq. projecting gateway of green tiles with roofed chamber above, as in Ch. xlix. 005; lv. 0011. Out of this Prince rides on Kaṇṭhaka. A courtier attends him on foot. Before him under a tree old man leans upon stick, another man stands by his side. Prince's attention is arrested, and courtier explains to him old man's case.

Scene 2. *Encounter with the Sick Man.* Identified by inscr. From the same gateway, this time on R., Prince rides with bent head, courtier walking on his R. Under tree in his path the sick man sits upon ground supported by friend in red coat, while another in green offers him drink in bowl. Emaciation of his body (naked to waist) and of arms spread upon his knees realistically shown.

Style Chinese; architecture and dress exactly as in Ch. xlix. 006. Wall painted in horizontal lines of yellow and buff; pavilion over doorway shows usual red timber frame with blue roof. For timber frame within gate, cf. *Ancient Khotan*, i. p. 447, Fig. 53. Prince and courtier are attired as Prince and Minister in Ch. xlix. 006; the former again has a white lotus on his head; the common personages wear usual long coats and tailed black caps; the old man a black hood which falls on his shoulders. Drawing very fine; colouring, as in companion banner, chiefly pink and light red with some dull green and black; the workmanship

delicate. For another reproduction of Encounter, see Ch. lv. 009.

1′ 3″ × 7″. *Thousand Buddhas*, Pl. XII.

Ch. lv. 0017. Painted silk banner; upper end of painting lost and all accessories, except three out of four bottom streamers of light brown silk. Painting almost unbroken, but much worn and faded.

Subject: *Dhṛtarāṣṭra, Guardian of the East*, or perhaps one of the Twelve Generals of Bhaiṣajyarāja, as Regent of the Sun. Fig. exactly in dress and style of Lokapālas of 'Chinese' type descr. in *Ch. 0035; see also *General Note*, *Ch. 0010. Stands ¾ L. on back and hand of demon, who rests on knees and elbows; both hands before him lightly support arrow. In his L. hand demon grasps red scaly body of a snake with gaping crocodile jaws.

Lokapāla has no mantle or tiara, but wears instead helmet with wide-curling rim and orange plume as in Ch. 0040 (but without gorget), and sausage-shaped collar clasped under chin. The most noteworthy point in dress, however, is absence of scale-armour, ground of doublet and of helmet being painted plain white. The face is human—short and round, with small slanting eyes shrewd and watchful but not ferocious. It is shaven except for slight moustache and tuft on chin.

Colouring mainly white and olive-green, lighted up by bright red and orange on details of dress. Doublet white with red borders and pleated edging at arms and thighs of olive-green; corslet orange with appliqué discs of olive-green and red jewels; straps, breast-belt, and hip-belt dark brown; stole red and olive-green on reverse sides; skirt uncoloured, with folds drawn in red; breeches white with olive border. Colouring of flesh has entirely disappeared, that of dress has much faded; but fig. remains good example of its kind both in design and execution.

Arrow apparently 'feathered' with leaf-shaped metal blade as in M. Tagh. b. 007; its barbed end outside painting.

Painting 2′ × 7″, length with streamers 4′ 8½″.

Ch. lv. 0018. Painted silk banner; top and bottom of painting lost, but remainder fairly intact and colour well preserved. Small plain weighting-board painted light red; three streamers of golden-brown silk roughly sewn to lower end.

Subject: *Lokapāla Virūpākṣa, Guardian of the West.* Stands ¾ L. on back of demon (incomplete), who crouches on hands and knees. L. hand on top of sword, which seems to hang from belt and shows interesting details in hilt and scabbard; R. hand raised supports on forefinger scarlet lotus bearing miniature Stūpa with elaborate base, dome, and umbrellas. Dress and general style of fig. as in *Ch. 0035; see also *General Note*, *Ch. 0010. Feet, however, in sandals, and breeches tucked into greaves.

Face human except for grotesque circular eyes with scarlet rims and a somewhat exaggerated nose of non-Chinese type. It has high cheek-bones, normal mouth, and thick pointed beard, moustache, whiskers, and curling eyebrows in a dark brown which is almost black. Ears have wide lobes, but are unpierced and of normal length.

Colouring throughout mainly strong green and crimson, with stole of dark green and grey, mantle of dark brown and black, and green halo. The small amount of scale-armour visible is yellow; as is also blank cartouche for inscr. to L. of halo. Flesh shaded with pink on natural greyish tone of silk, but general effect dark. Fig. has much force, and work good throughout.

Painting 1′ 6½″ × 6⅞″, length with streamers 4′ 2″. Pl. LXXXV.

Ch. lv. 0019. Painted silk banner with head-piece like that of Ch. i. 0010, and side streamers of green silk, discoloured and repaired. Lower end of painting lost, but general condition good.

Subject: *Bodhisattva* (Avalokiteśvara?). A replica of Ch. xxvii. 003, but finished on reverse side. In front of tiara has been added small ovoid-bodied flask, white spotted with red. Colouring yellowish red (on flesh and skirt), olive-green, dark brown, and pink. Upper end of painting strengthened by patch of blue silk muslin.

Painting 2′ 5½″ × 10½″, length with head-piece 3′ 2¼″. Pl. LXXXI.

Ch. lv. 0020. Painted silk banner; all accessories preserved except weighting-board; top of painting lost, but remainder in excellent condition.

Head-piece of much-frayed dark blue silk, bound with silk of faded purple; one side streamer of sage-green plain silk, other of silk damask of same colour woven in small lozenge lattice-work; bottom streamers of brown silk orn. with clouds and flower sprays in black, as in *Ch. xvii. 001, etc. The painting has broken at top and been attached again to head-piece by patch of purple silk put on behind.

Subject: *Virūpākṣa, Guardian of the West.* Stands ¾ R. on back of crouching demon; R. hand raised and open with fingers spread, L. holding naked sword upright beside head. A good example of 'Chinese' type of Lokapāla descr. in *Ch. 0035; see also *General Note*, *Ch. 0010. There is, however, no mantle, and breeches are tucked into greaves, while feet shod with sandals.

Armour-scales oblong over shoulders, body, and skirt of coat; and beneath hip-belt, which is rather high, appears the shaped leather aprŏn and flaps giving additional protection to lower part of body. A series of loose metal rings, here serving no purpose, but prob. for attachment of scabbard, etc., hang round lower edge of belt. Face middle-aged and serious, with heavy cheeks, spreading moustache, and small tuft of beard on chin. Eyes are oblique and slightly enlarged, but whole effect human, not monstrous.

Colouring entirely very light brown and pale red, with smaller quantity of darker brown and yellow and a little black. No green or blue, even on sword, the blade of which is painted light brown. Red found on skirt, breast girdle, borders of coat of mail, appliqué discs on corslet, arm-guards, and greaves, and on horn-like streamers of tiara; pale brown on ground of corslet, arm-guards, and greaves, one side of stole, pleated edge of coat of mail, border of skirt, leather apron, and jewels; dark brown on reverse of

stole and on ankle-guards. Scale-armour yellow and red, lace-holes marked in brown; hair, hip-belt, and sleeves (?) on upper arm, black.

Flesh is shaded light red on brownish-white of silk; iris of eyes yellow. Halo brown tinged with green, and on R. part of cloud is green and red. Yellow cartouche for inscr. to R. of head, blank.

Painting 1′ 10½″ × 7¼″, length of whole 5′ 10″. Pl. LXXXIV.

Ch. lv. 0021. Painted silk banner; all accessories lost, and painting considerably worn and broken. Companion banner to Ch. lv. 0022.

Subject: *Scenes from Life of Buddha*; Chinese in style; parts of four preserved. Painting bordered at sides by 1″ band of buff decorated at regular intervals with curved lines of orange-red and black and bands of orange-red, green, and blue, suggesting ornamental rings on turned wooden baluster transversely divided into three sq. panels by straight bands, 1⅜″ wide; the two upper orn. with waved band of shaded green, blue, orange, and black with half-rosettes in hollows; the lowest with half of large repeating rosette pattern in same colours on an orange-red ground.

Scene 1. Identification uncertain. In foreground, rising from ground appears white elephant-head, seen directly in face and cut off by lower edge of panel at about base of trunk. On top of it a yellow double lotus supporting slate-blue jewel, from which vague flickering lines seem to be drawn upwards (in the tracing), perhaps representing flame. On R., behind, a white lion seated on rock under tree. On L. under another tree stands a man in long red-sleeved coat bordered with blue. He holds up his hands before him, open; his hair is done in three-pointed top-knot on the top. In background appears high-walled enclosure, with gateway in front, of same type as in Ch. lv. 0016, etc. Within, red, blue, and green elliptical spots are ranged along horizontal lines of orange-red and black; their meaning doubtful. [The scene may possibly represent in some form the Tri-ratna: Buddha, the Law, and the Community of Monks. The white lion in any case is an accepted symbol of the Teaching of Buddha (Dharma), while the fig. on L. might represent the Community, as a disciple.]

Scene 2. Unidentified. L. side and foreground lost. There remains on R. a fig. in same blue-edged coat and with same coiffure as in scene above, seated on verandah of a pavilion. His hands are raised as if in blessing, and his gaze fixed on L. bottom corner, where traces remain of fig. in brown robe with uplifted hand. Outside verandah stands also a man in red belted coat, turning in same way towards brown-robed fig., and stretching out both arms to him with hands drooping.

Scene 3. Unidentified. Most of foreground lost. The corner of an open pavilion fills greater part of scene. Within it, on sitting-platform kneel two figs. dressed as in preceding scenes. Their hands joined as in adoration; between them in background stands servant in green coat holding fan (?) in folded arms. Before verandah stand two smaller figs. One in R. corner, in blue-edged red coat, with his hands joined in adoration, is merely an attendant, his attention like that of kneeling figs. turned to other who seems centre of interest of scene. This last is dressed in belted red coat and black boots, and stands with head bent down and hands apparently held out before him at breast; but the painting is smudged, and details indistinguishable. Between him and attendant in R. corner, in midst of green ground, a sq. patch of light brown with black marking, having a red wooden railing on either side of it; and on this his attention seems to be bent. The object intended is not clear. All figs. have their hair done in triple top-knot referred to in scene (1), etc.

Scene 4. Unidentified. This seems to be in two parts. It shows angle of a courtyard wall, with verandahed building inside, and high gateway on R. (of same type as in Ch. 0039; lv. 0016, etc.). Within verandah sits the Bodhisattva, as naked infant on lotus, but he is almost effaced. Whole R. upper half of scene lost, but traces remain of fig. in blue-edged red coat standing before him. Outside courtyard wall, the infant Bodhisattva, without halo, is again seen riding on white elephant. He is seated cross-legged on red lotus with hands joined; and behind him walk two attendants, one holding over him a canopy. On his L. ride two more figs., on white horses with red manes and tails. (The horses are badly drawn, and have only four legs between them.) The foremost rider, like attendants behind, is in familiar blue-edged red coat and with his hair done in the triple top-knot; the other is prob. a woman. She rides astride, but wears green robe with red stole or shawl, and her hair clusters about her head.

Drawing bad and careless throughout, and the workmanship generally on a level with that of Ch. xxv. 001, which prob. belongs to same series, from similarity of such details as decorative bands between panels and double cartouches. Double cartouche (blank) in orange-red, for inscr., lines each scene, placed alternately on R. and L.

2′ 1½″ × 7″ (7½″ when complete).

Ch. lv. 0022. Fr. of painted silk banner; all accessories lost, and great part of painting; remainder worn. Companion to Ch. lv. 0021, and with similar painted borders and bands between scenes.

Subject: *Scenes from Life of Buddha.* Two preserved (incomplete) and border only of third.

Scene 1. Unidentified. Upper part lost. In middle sits Buddha on lotus pedestal, legs crossed, R. hand in *vitarka-mudrā*, L. lying over knee. R. shoulder, arm, and breast bare, flesh yellow; circular orange halo behind head, and elliptical green vesica behind fig. from which undulate red and blue rays. On either side kneel two disciples on blue lotuses, their hands joined in adoration. They are without haloes, have wide-sleeved red coats with blue borders, and triple top-knot coiffure common in Ch. lv. 0021; xxv. 001.

Scene 2. Unidentified. On L. Bodhisattva sits on lotus pedestal under canopy. His dress, ornaments, and coiffure are of 'Indian' type, simplified (see *Ch. lv. 0014). Flesh pink, pointed orange halo behind head, and elliptical green vesica behind fig. Before him on ground, but turned with R. side to him, kneels or squats small fig. in red-sleeved coat,

holding both its hands up with the palms to itself. A little to back stand two larger figs. with hands in adoration. They wear red under-robes and blue-edged red coats of the preceding scene. Coiffure of one lost; hair of other seems to be done in backward-falling top-knot. Behind, a tree.

Scene 3. Of this only the jewelled flat top of a throne or canopy remains in R. top corner.

Style of work poor as in Ch. lv. 0021.

1′ 6½″ × 7″ (7½″ when complete).

Ch. lv. 0023. Large dated silk painting with Chin. inscr., representing *Samantabhadra*, *Mañjuśrī*, and *Four forms of Avalokiteśvara*, with attendants and donors. Date given by inscr. A.D. 864. Complete with orig. border of fawn-coloured silk, and in good condition.

Upper half of picture occupied by four figs. of Avalok. standing side by side, face to spectator, and carrying each a red or red and white lotus and flask (except in case of Avalok. on extreme L., who has not the latter).

Dress a long reddish-pink under-robe girt round waist and reaching to feet, with short tight over-fall or upper skirt, and girdle as in *Ch. 001, etc. Over breast and shoulders a deep plastron painted in plain red and blue or red and green with metal border, and ending at line of necklace on neck. Close-fitting sleeves, half covered by armlets, on upper arm; and in three cases metal-orn. guards on forearm like those of Lokapālas in banners. Pink drapery behind shoulders, narrow stoles, and tiaras with Dhyāni-buddhas are all of 'Indian' Bodhisattva style (see *Ch. lv. 0014), to which their coiffure also corresponds.

In lower half Samantabhadra (L.) and Mañjuśrī (R.) advance towards each other, seated cross-legged on white elephant and lion resp. The latter are like those of banners (see Ch. 0023; xx. 001), and are led by Indian attendants of similar type. S. has R. hand in *vitarka-mudrā*, L. raised horizontally with fingers in similar pose; M. has hands at breast in adoration; each accompanied by two Bodhisattvas carrying three-tiered umbrellas. Dress, orns., coiffure, and physical type of all these are of 'Chinese Buddhist' type as in *Ch. 002, etc. Canopies, Padmāsanas, haloes, and vesicas are of types seen in large Paradise pictures (e.g. *Ch. lii. 003), haloes and vesicas all being circular and covered with ray or petal orn. of kinds therein described.

The donors consist of one monk and three men in secular dress kneeling on R., and two nuns and two ladies on L. Dress of monks and nuns is same as in Ch. xx. 005; that of non-religious persons agrees in general type with the tenth-century dress of *Ch. 00102; lviii. 003, etc., but differs in colour and characteristic details. The men wear long belted dark brown coats (under-skirts not visible), and in two instances the wide-brimmed black hat of Ch. 00102. The third wears stiff black cap, rising up and backwards in a double peak. The women wear long skirts, jackets, and stoles much as in Ch. 00102; but skirts and stoles coloured light buff and jackets yellow; sleeves of latter of very moderate width, hanging hardly below waist. They wear, moreover, no orns., and only plain band round hair. This in one case is done in flat mushroom-shaped top-knot, and in other in large rippling backward-waving top-knot like the dancing woman's in banner Ch. xlix. 005. In these respects the donors' attire corresponds to that in Ch. xx. 005 (A.D. 891); xxxviii. 004; liv. 004; cf. above, p. 885, note 10.

For inscr.—consisting of one short line by each of the Avaloks., Samantabhadra, and Mañjuśrī; dedication, 4 ll., incomplete, in centre below; and one line before each donor —see Petrucci, Appendix *E*, II.

The composition as a whole has a somewhat stiff cramped air; disjointed repetition of figs. in upper half recalls the prob. early paintings Ch. xxii. 0017, 0023. Apart from hieratic 'Indian' tradition preserved in all chief deities and especially in dress and treatment of figs. of Avalok., details and workmanship throughout in 'Chinese Buddhist' style of *Ch. 002, 003, etc. It is clear from sureness and finish of style that the conventions it follows were already well established, though the atmosphere and line which characterize other (and prob. later) representations of this subject are entirely lacking; cf. Ch. xxxvii. 004, 003–5.

Colour in good condition, and consists almost wholly of light reddish pink, soft blue, white, and dark green on brownish grey of silk.

Painting 4′ 5″ × 2′ 10½″, with border 4′ 7½″ × 3′ 2½″. *Thousand Buddhas*, Pl. XVI; *Desert Cathay*, ii. Pl. VIII.

Ch. lv. 0024. Large painting on close-woven linen, in purely Tibetan style, representing *Avalokiteśvara* seated, with small Bodhisattvas and Eight Sacred Emblems. No border; practically complete, but painting almost effaced. Colours applied over coat of white as in other Tibetan painting Ch. lii. 001; but here evidently light in tone, only traces of rosy red, yellow, and dull green preserved. Emblems and Bodhisattvas round edge have been redrawn over similar small seated Bodhisattvas, and small figs. attendant on Avalok. in centre have been painted over with foliage and long-tailed flying birds now almost destroyed.

Oblong central panel, framed by border of Vajras, contains large Avalok. seated in 'royal ease'. Type of fig., dress, jewels, and Padmāsana as in Ch. 00121; pose same but reversed, i.e. L. knee is raised and L. hand hanging over it holds rosary. Circular vesica, narrow horseshoe halo, black ringlets on shoulder, pearl-hung jewellery, and canopy; details of head and features effaced. In corners above two small seated Bodhisattvas, and below Bodhisattva and conventional lion seated on either side of vase with flowers; but painted over as above described.

Round edge are placed alternately on lotuses, the Eight Sacred Emblems and small seated Bodhisattvas, with Dhyāni-buddha immediately above Avalok. Of Emblems are traceable only Wheel, Vase, Vajra (?), Canopy, and Fish; the lower on R. side being effaced, and those along bottom painted over like figs. in middle.

Cf. other seated Avaloks. under Ch. 00121. 4′ × 2′ 9″.

Ch. lv. 0025. Fr. of painted silk banner; upper end, showing tasselled canopy, surmounted by flaming jewels. Dull yellow, green, and red on buff background.

7″ × 5½″.

Ch. lv. 0026. Painted silk banner with head-piece; all streamers lost. Head-piece of buff silk orig. painted with floral design, and binding of same; in bad condition. Painting somewhat broken, but colours fresh.

Subject: *Bodhisattva*, with flaming jewel. Pose, coiffure, and dress the same as in Ch. 0083; i. 005, and fig. prob. traced from same orig. R. hand, however, holds flaming jewel instead of censer, and many small alterations occur in painting details of dress and jewels. Chief of these is addition of gauzy blue stole which drapes upper arm and fills up spaces of background between hanging draperies. Inside of ears, and hands, and lower lines of feet are drawn in red.

Colours gay, varied, and well-preserved; the most prominent being bright crimson and copper-green of V-shaped stole, and light blue of halo centre, streamers, gauzy stole, and lotus underfoot. Colouring otherwise composed of pale pink, chocolate, orange-yellow, and red. Outlines uneven in thickness, and workmanship generally less careful than in Ch. 0083; i. 005.

Painting 2′ 4″ × 6¾″, length with head-piece 2′ 9″.

Ch. lv. 0028. Votive patchwork, composed of rectang. pieces of figured silks, damasks, and embroideries, with border of printed silk; the whole backed variously with cream, brown, golden-yellow, light blue, and sage-green silks, and in places with a brilliant red linen. Most of centre and lower middle part is lost, but remainder shows carefully designed balance of colours and materials. Surface worn but still glossy, and colours glowing and varied, giving a very rich effect.

All round runs a 6″ border of printed silk, much faded, but showing an exceedingly graceful design (Pl. CXXII) of entwining and parting stems, bearing heart-shaped or narrow leaves and wide-open five-petalled flowers. In spaces formed by parting stems grow free-end sprays, to which cling, with beak and claw, pairs of confronting parrots. Printed in dark blue, green, and peach-colour (?) with fawn ground; outline of design left the natural colour of silk. The whole border was orig. made of this, but it has been repaired in places with another printed silk of like colouring and a larger floral design too fragmentary for reconstruction. It is lined with fine cream damask, woven in reversed twills, one for the ground, the other showing a peculiar pattern of squares or oblongs connected by parallel lines.

The chief fabrics in body of patchwork are as follows (the numbers corresponding to those on key covering Pl. CVIII):

Figured silks. [1] Figured silk with design of alternating rosettes and four-armed floral spots like that of Ch. 00171. Same weave; paler and more delicate colouring of soft blue and green (flowers and leaves), brown (stems), and yellow (outlines of octagon, etc.) on creamy ground. Frayed in places, but otherwise fairly preserved.

[2] Figured silk in satin twill, soft buff silk warp; pattern, rows of four-petalled rosettes with small trefoils springing from ends of petals and from between each pair, and making continuous circle round flower. Rosettes rosy-pink (?) or buff with buff trefoils; ground dark peacock-blue. Surface much worn.

[3] Figured silk, woven in multiplicity of variegated bands, complete scheme of which cannot be recovered from frs. Ground throughout a single cloth woven in small twill, with a very fine buff warp slightly stiffened and weft of white, brown, dark and pale blue, tomato-red, light and myrtle green, running in bands which vary from ⅛″ to ⅞″ in width. Some of narrower bands are plain, but majority have further inwoven orn. in the shape of (*a*) a row of single large hexagonal rosettes, pink and white on myrtle-green, green and pink (?) on white, or dark blue and green on tomato-red; or (*b*) a row of smaller rosettes, each alternate rosette having a pair of spreading leaves springing from top and bottom petals, the leaves light green, the flowers pink on myrtle-green or dark blue on red; or (*c*) small flattened lozenge-shaped rosettes, white on brown or buff on blue; or (*d*) a line of half-rosettes and chevrons, yellow or white on buff; or (*e*) large rosettes woven in white or in bands of contrasting colours over group of five or six of narrower ground stripes.

For all this additional pattern separate weft threads are introduced, being carried along back of material in bands where required and brought into web only where a flower occurs. When brought to the surface, in majority of rosettes, this weft is not inwoven with warp, but passes over as many of its ends as necessary to form the width of petal, and is then taken behind. The surface of the petal therefore presents a series of unprotected threads, which have largely been worn away, exposing the warp. Where the rosettes are placed over a series of ground stripes, they are woven in twill like the ground. For other true brocades of same weave, see Ch. 00170 and 0065.

[4] Figured silk, fine satin twill; much faded and design almost effaced, but apparently consisted of running stems forming crescent-shaped loops with flowers at tips, and detached pair of outspread leaves above each flower. Rows alternately mainly green and mainly blue, with touches of dark brown, white, and yellow, on reddish-bronze ground.

[5] Figured silk, in several small pieces joined; a true double cloth, loose weave, much perished; pattern apparently large rosettes with pairs of leaves above and below. Double warp consists of (*a*) very fine stiffened buff yarn; (*b*) broad flat soft yarn of dark myrtle-green; (*c*) double weft of very fine green yarn; (*d*) thicker soft yarn, rose-pink, white, or blue as required. Broad yarns (*b*) and (*d*) alone show on surface, (*c*) and (*a*) with which they interweave being practically invisible; (*b*) myrtle-green forms ground, and (*d*) pattern. Cf. Ch. 0076 for corresponding effect obtained with single exceedingly fine warp and double broad weft.

[6] Figured silk, in fine satin twill; pattern may be reconstructed from [8], here only two small frs. incomplete. Larger shows part of large rosette band, dark blue on scarlet ground (faded) with dark blue trefoils and quatrefoils, and foliage in light green above and below. Smaller shows lower edge of band of large green rosettes with green trefoils in spandrels; below these white horizontal trefoils, and below them pair of confronting ducks admirably executed. Yellow heads, necks, and curling wing tips, white breasts, blue backs, green beaks and tails, red eyes.

Alternating with trefoil and duck groups are elliptical white rosettes. Surface worn.

[7] Figured silk of same weave and similar design; see [8]. Pattern preserved consists of row of large six-petalled rosettes, dark myrtle-green on bright red ground, with white centres outlined with red. Trefoils in spandrels myrtle-green, rising from between pale blue trefoils (horizontal); yellow ducks below; small rosettes alternating with trefoil groups, pale blue. Surface worn.

[8] Figured silk, satin twill; design same as that of [6] and [7] but showing complete scheme. Rows of six-petalled rosettes are set out diagonally, with vertical distance between rows of *c.* 1¼". Above each row runs a zigzag band of foliage and tendrils, the points ending respectively in upward and downward pointing trefoils which occupy spandrels between rosettes above and below. The chief mass of foliage occurs directly over each rosette, and in it perch two confronting birds with ruffled wings; over their heads lie two horizontal trefoils, with an upright trefoil springing between and filling the spandrel as referred to above. In spaces to R. and L. of the horizontal trefoils, and just off bottom petal of large rosettes, are small flattened four-petalled rosettes; between the large rosettes, as placed in their horizontal rows, are small quatrefoils. Ground indigo; pattern woven in bands of colour irrespective of details of design, as follows: (i) at top, large rosettes with quatrefoils and trefoils in spandrels, buff; (ii) horizontal trefoils in foliage band and small rosettes, pale blue; (iii) birds and mass of foliage, buff and yellow (?); (iv) large rosettes as in *i* with quatrefoils and trefoils, red; (v) repeating *ii*, pale green; (vi) repeating *iii*, buff and light blue; (vii) repeating *i* and *iv*, in orig. buff. Much frayed.

[9] Figured silk, satin twill, woven in chevron bands of (i) white and dull yellow, (ii) myrtle-green and gamboge. Chevron runs vertically and each band is ½" deep. Seems to imitate braid.

Embroideries. The chief specimens of these are: [10] Two very fine pieces of floral embroidery on cream silk gauze backed with plain cream silk. In one the gauze seems to have been purposely cut away round design after embroidery was completed. Each little panel is complete, and shows a central pendent seven-petalled flower with leaves and buds on curving stems hanging on each side, and a smaller flower and buds immediately below. Worked in satin-stitch in shaded true blues and greens and greenish blues, black, buff, red, cream, and mauve. Calyxes of lower buds unfinished in one piece. Fine work of characteristically Chinese style (cf. *Shōsōin Catalogue*, ii. Pl. 96); silk still fresh and glossy.

[11] Various pieces of flower, bird, and butterfly embroidery on red silk gauze backed with red silk. Gauze cut and worn away. Small all-over pattern, prob. much like Ch. 00281. Remains very ragged. Flowers white, yellow, and pink (?); birds shaded blues and white, or buff and white, with long humming-bird tails; leaves pale green, yellow, and greenish indigo. Seems to have occupied large part of centre of patchwork, now lost.

Damasks. The damasks are found mainly in two groups, [12], on R. and L. lower edge of patchwork. They include: (i) pale lemon-yellow with dragon-fly (?) design; (ii) buff yellow, with trefoils or lozenges counterchanged; (iii) rich purple, with rounded bud and leaf forms and head of bird (?); (iv) red, same as Ch. 00374. All these have plain ground, and pattern in twill. Also (v), pale yellow, with lozenge diaper, and others completely destroyed.

In middle are two large damask pieces, formerly background to embroidery: [13] Fine dark slaty-blue, rather loose weave; ground plain, pattern twill; design four-petalled lozenge-shaped rosettes in rows, set out diagonally.

[14] Wine-coloured damask, loose weave, much perished; ground plain, pattern twill; design small lozenges in rows set out diagonally.

Printed silk. [15] Along lower edge just within border runs a band of very coarse cream silk, plain weave and open texture, printed in dark brown with circular rosettes and four-armed spots like those of Ch. 00171, figured silk, etc. Middle of rosettes done in crimson spots.

The designs are naturalistically treated throughout, and many more or less close parallels in foliage groups, birds, and rosette forms are found in the Shōsōin. 5' × 3' 6". Pls. CVII, CVIII, and (design of printed border) CXXII.

Ch. lv. 0029. Painted silk banner of 'Indian' type, as *Ch. lv. 004. Top and bottom of painting, and all accessories, lost; colour much dimmed.

Subject: *Avalokiteśvara.* Fig. stands facing spectator on lotus; R. hand hanging by side, palm out in *vara-mudrā*, L. raised from elbow carrying pink lotus. Skirt of transparent white stuff spotted with red, revealing limbs of somewhat round and delicate contour; *laṅgoṭī* dull pink; stoles of dull red and green; traces of white paint on body and arms. Tiara a massive circlet of metal-work set with high triangular ornaments and red lotuses, with representation of seated Buddha on front. Hair on top of head done in high cone. Face short and full, with downcast eyes and mild expression. 1' 5½" × 6¾".

Ch. lv. 0030. Painted silk banner of 'Indian' type, as *Ch. lv. 004. Top and bottom of painting, and all accessories, lost; much broken and dimmed.

Subject: *Mañjuśrī.* Cf. also *Ch. xxvi. a. 007. Fig. stands on lotus, weight thrown on R. hip, and body inclined to R. (spectator's); head ¾ L. R. arm bent up at elbow, and hand extended palm uppermost with third and fourth fingers bent. L. carries sword resting on shoulder. Skirt of dark striped pink and green, over red *laṅgoṭī*; white girdle and dull brown stole. Face almost identical with Ch. lv. 007, 008. Tiara consists of circlet set with triangular ornaments and pink lotuses, and containing high conical head-piece which completely covers top of head. Flesh painted dark green, except lips, palms of hands, and edge of soles of feet, red. 1' 4" × 6¾".

Ch. lv. 0031. Remains of painted silk banner of 'Indian' type, as *Ch. lv. 004. Much dimmed and all accessories lost.

Subject: *Bodhisattva*, perhaps Avalokiteśvara. Fig. (lost

from below knees) was standing facing spectator, weight carried on L. hip and body thrown to L. (spectator's). R. arm bent up at elbow and hand extended palm uppermost, holding between finger and thumb long stem of pink lotus on which rests a book. L. hand raised before breast, palm out, thumb and third finger joined. Skirt of transparent white stuff, spotted with red, over green *langoṭī*; stoles of dull red green and brown. Face round, with wide mouth and small curls along forehead. Remains of yellow paint on R. hand. $11\frac{1}{2}'' \times 7\frac{1}{4}''$.

Ch. lv. 0032. Painted silk banner, in 'Indian' style; complete except for weighting-board and part of bottom streamers, but considerably repaired. Remains of painted Buddha in triangle of head-piece, and two Chin. chars. on border. Streamers of plain dark brown silk; head-piece bordered with cinnamon-coloured silk.

Subject: *Avalokiteśvara.* Much like Bodhisattva of *Ch. lv. 0014; same stiff attitude, coarse colouring, and identical treatment and arrangement of drapery. Flesh outlined with dark red, and painted white shaded with pink, but has lost much colour. L. hand holds willow branch before breast; R. hanging by side carries flask. Skirt buff with folds in dull blue; girdle red and yellow with white inner side; stole Indian red and green; scarf across breast dark purple and olive; drapery behind shoulders red and yellow. Jewellery, head-dress, etc., as in *Ch. lv. 0014; but no armlets, and hair on top of head dressed in high cone. Face more carefully drawn and well preserved. Painting $1' 10'' \times 6\frac{1}{2}''$, length of whole $4' 9''$.

Ch. lv. 0033. Large silk painting representing *Paradise of Amitābha* (*or Śākyamuni?*), with side-scenes showing legend of Ajātaśatru and meditation of Queen Vaidehī, as in *Ch. 0051. General arrangement and treatment similar. Incomplete at top and bottom, but legendary scenes and 4" silk border at sides almost intact; generally well preserved, but colour faded.

Pose of presiding Buddha same as in Ch. v. 001. Bodhisattva on L., prob. Avalokiteśvara from Dhyāni-buddha on front of his tiara, has R. hand in *vitarka-mudrā*, and L. raised as if in blessing with thumb and two fingers erect. His companion on other side, with blue lotus bud on front of tiara, has hands in adoration. Usual company of Bodhisattvas, dancer, and musicians occupy main terrace. Musicians play on lute, pipe, clappers, harp, mouth-organ, and flute, all of same type as in *Ch. lii. 003 (but see for slight variations Miss Schlesinger's notes, App. *H*). In bottom corners subsidiary Buddhas with their attendants.

Infant souls with upstretched arms float on lotuses upon lake; in centre foreground seems to have been a raft with birds as in Ch. xxxiii. 003, etc. Elaborate galleries, verandahs, and pavilions of mansions behind are inhabited by Buddhas, Bodhisattvas, a double-headed Garuḍa playing on lute, and a white crane. Small Buddhas rise on clouds beyond roofs.

Composition less crowded than usual, giving effect of space, which is increased by light background of pale blue used for floor of main terrace in place of black. Architecture elaborate, but ornamentation of haloes and dress simple. Colouring light, consisting almost entirely of bright crimson, light blue, and green on a background of two latter colours. There are no dark spots except in black hair of all secondary figs. and dark brown of railings in celestial buildings. Roofs of galleries and pavilion supported by open rows of crimson pillars, without solid walls.

Flesh of all figs. left the greenish brown of silk shaded with (faded) red. Buddha's face long and rectangular; those of Bodhisattvas and nymphs of large-cheeked aquiline-nosed type, with prominent eyes, the sockets of which are emphasized by wide semicircle drawn round inner angle. The work is by a practised hand and adequately finished, but lacks the special refinement of *Ch. lii. 003.

The *side-scenes* (see *Ch. 0051) are in usual secular Chinese style, and represent on R.:

(i) Śākyamuni on Mount Gṛdhrakūṭa; he stands between two flowering trees, visible to knees, under precipitous cliffs; (ii) setting of this and following scenes on R., as in Ch. lv. 0047; Bimbisāra in prison, and Vaidehī throwing herself down before the Buddha who appears on cloud; (iii) Ajātaśatru pursuing his mother with sword; minister and physician not shown; (iv) Ajātaśatru receiving visitor, who remonstrates with him on his treatment of his mother (?); same as Ch. lvi. 0018. *vi* (q. v.); (v) Vaidehī visiting Bimbisāra in prison; she carries golden wreath as in Ch. lv. 0047. *vi*; in sky Maudgalyāyana appears on cloud; (vi) almost entirely destroyed, but shows man on horse, and is prob. same as unidentified scene *v* in *Ch. 0051, etc.

On L. is Queen Vaidehī meditating on *Sukhāvatī* as follows: (vii) on Sun, here containing the phoenix; (viii) on Moon (?), a white disc within tank-like enclosure; cf. Ch. xxxiii. 003. *viii*, and lvi. 0018. *xiii*; (ix) on Water as the Lake (?), a green enclosure; (x) on Water as ice (?), same as in Ch. liii. 003. *x*; lvi. 0018. *xii*, etc.; (xi) on the Ground of *Sukhāvatī*, or the Lake of Eight Virtues (?), a green square within chequered border subdivided into ten or eleven smaller squares; cf. Ch. 00216, etc., but the small squares here marked like water; (xii) on the Mansions of *Sukhāvatī*, represented by pavilion; (xiii) on the Flowery Throne, a pedestal resting on a lotus, and with the Maṇi on top; (xiv) on the Jewel-tree; (xv) on Buddha Amitābha or Amitāyus, standing; (xvi) on Avalokiteśvara; (xvii) on Mahāsthāma; (xviii) on Amitābha or Amitāyus, seated on Padmāsana; (xix) on Rebirth in *Sukhāvatī*; another woman like herself and unhaloed, kneeling on mat opposite her with hands in adoration; derived from scenes like Ch. xxxiii. 003. *xvi*, and lvi. 0018. *xvi*; (xx) on Rebirth in *Sukhāvatī*; an infant within pointed halo rising from lotus; (xxi) destroyed.

The Queen's dress and coiffure as in *Ch. 0051. Blank cartouche, red or yellow, for inscr. placed by each scene.

$6' 2'' \times 6' 5''$.

Ch. lv. 0034. Painted silk banner, in 'Indian' style; retaining triangular head-piece and side streamers. Lower end of painting with streamers lost. Head-piece bound with fine hand-woven tapestry identical with that of Ch. 0058 (Pl. CVI). Triangular panel shows floral design, with bright red and blue

flowers on twining stems painted on fawn background, but is much broken, and whole of centre is covered by patch of purple silk gauze like Ch. 00344. Top of painting itself has broken away and been reattached to head-piece by backing of plain dull brown silk, from which hang side streamers of the same. Another patch of plum-coloured silk has been sewn across painting below, covering top-knot and tiara of fig.

Subject: *Bodhisattva*, perhaps Avalokiteśvara. In all main features practically same as Ch. lv. 0032, but arms here both raised from elbow; R. horizontal before breast with second and third fingers curved, L. holding flaming jewel on finger-tips. Colouring of same thin and dead quality; skirt dull red, girdle green and white, scarf on breast crimson and green, stole dull purple-brown with yellow and red on reverse side, shoulder draperies almost effaced, outlined grey; red lotuses at ears. Flesh white tinged with pink. Painting 1′ 8½″ × 7⅜″, length of whole 2′ 2½″. Pl. LXXX.

Ch. lv. 0035. Linen painting with Chin. inscr., showing *Avalokiteśvara*, standing. Green linen border (except at bottom); good condition. Pose and emblems as in *Ch. 0052, but workmanship much better, and fig., dress, and coiffure of 'Chinese Buddhist' type (as in *Ch. 002). No Dhyāni-buddha, but Stūpa in front of tiara. Colouring salmon-red, yellow, olive-green, and dark grey. Inscr. contains only salutation to Kuan-yin. (With border) 4′ 5½″ × 2′ 2″.

Ch. lv. 0036. Painted linen banner with Chin. inscr. Head-piece border and streamers lost. Otherwise fair condition.

Subject: *Avalokiteśvara*, standing ¾ L. with hands in adoration. For general descr. of type, and list of similar banners, see *Ch. i. 0016. Colouring only red, yellowish green, and yellow; inferior drawing. Inscr. consists of salutation to 'Kuan-yin of long life'. 3′ 5″ (with head-piece) × 10″.

Ch. lv. 0037. Painted linen banner; one of set enumerated under Ch. liv. 008. Same subject as liv. 009; good condition. Painting 1′ 5″ × 6¾″, length of whole 3′ 5″. Pl. LXXXVIII.

Ch. lv. 0038–43. Six painted linen banners; complete with head-piece borders of buff linen, side and bottom streamers of greenish-blue linen, and paper weighting-boards painted with conventional lotus design. Small size, dirty; workmanship of roughest description; colouring only red and dingy yellowish green.

Subject of all: *Avalokiteśvara* (?), standing ¾ L. or R. with hands in adoration. For general descr. of type and list of similar banners, see *Ch. i. 0016.

Painting 1′ to 1′ 1″ × 5½″, length of whole 2′ 10″.

Ch. lv. 0044. Lower end of painted silk banner, with four bottom streamers of greenish-grey silk (discoloured), and weighting-board painted with lotus design in black and dark green, outlined yellow, upon dark red.

Subject: *Bodhisattva*. Stands ¾ L. upon bright yellow lotus, red-edged; from knees down only preserved. Draperies and style of work as in *Ch. 002. Colouring chiefly pink, slate, green, and crimson, all fresh.

Painting 11¾″ × 6¾″, length with streamers 4′ 3″.

Ch. lv. 0045. Painted silk banner, retaining three bottom streamers of fine brown silk. Head-piece, side streamers, and upper end of painting lost; remainder much broken.

Subject: *Avalokiteśvara* (Kuan-yin). Head lost, but fig. practically identical with Ch. i. 0013 and prob. traced from same orig. L. hand however holds willow leaf in place of lotus bud, and work is much more careless in detail; e. g. drawing of R. hand holding flask, and painting of jewels. Colouring, fairly preserved, consists chiefly of deep pink (on stole) and light red approaching scarlet (on skirt). Reverse of stole is olive-green (much lost), streamers orange and scarlet, lotus underfoot light blue. Agitated tassels swinging out from robe suggest rapid movement.

Painting 1′ 5¼″ × 7½″, length with streamers 4′ 2″.

Ch. lv. 0046. Painted silk banner, with Chin. inscr.; broken at top and all accessories lost. Otherwise almost intact, and colour exceptionally fresh.

Subject: *Virūpākṣa, Guardian of the West*, inscr. reading *Hsi fang P'i-lou-p'o-ch'a t'ien wang*, stands, turning slightly L., on knee and shoulder of squatting demon, holding before him long sword in scabbard whose point rests on demon's head. Dress generally as in *Ch. 0035 (see also *General Note*, *Ch. 0010), but without skirt, greaves, or stole; legs clad only in breeches tied below knee and hanging loose to ankle.

Coat of mail rather long, and over hips and front hang small trefoil-shaped flaps of green leather. Round neck, over dark brown mantle, a sausage-shaped collar, white spotted with pink rosettes, fastened by jewel under chin; narrow streamers fly from shoulders and elbows. Scale-armour painted yellow and red; scales oblong with nicked edge in skirts, and overlapping upwards; round-edged on body and shoulders. Feet shod with string shoes of same pattern as in Ch. 0022. Whole of legs and drapery below knees is uncoloured, showing traces only of white. Arm-guards painted in horizontal bands of brown, indigo, green, and crimson.

Face large-cheeked and irregular in shape, and wears pleasant expression. Eyes are oblique, well opened, gazing up to L., nose long and protruding, mouth small and parted, ears elongated and orn. with rings. Hair black, festooned on forehead; head-dress a close-fitting cap of olive-green with red 'cock's-crest' rising at back, whole elaborately bound with gold and decked with jewels, tassels, and streamers at ears. Circular halo dull brown with indigo border, flame-edged, and behind is brown cloud.

Demon painted grey, with bony face, red falling hair and wide tight-shut mouth. He squats on R. knee and L. foot, and supports Virūpākṣa's foot with R. hand. Chief colours, as descr. above, are yellow and red of scale-armour, crimson of corslet border and discs, breast-girdle, breeches (to knees), and hair and *dhōtī* of demon, and greenish indigo of

corslet ground and borders of coat of mail. Minor parts of dress mostly in dark olive-green or brown. Colouring very fresh and clean, and work carefully finished; but tints are opaque and somewhat hard. Inscr. on yellow cartouche to L. of head.

2′ 1″ × 7¾″. Pl. LXXXIV.

Ch. lv. 0047. Large silk painting with Chin. inscr., representing *Paradise of Amitābha* (*or Śākyamuni*), with side-scenes showing legend of Ajātaśatru and meditations of Queen Vaidehī. General arrangement and treatment as in *Ch. 0051, etc. Complete at top and sides except for border, and generally well preserved; but lower end broken and in poor condition. Silk of coarser texture than usual, and paint accordingly more thickly laid on.

Pose of presiding Buddha same as in Ch. v. 001. Two chief Bodhisattvas have no distinctive attributes; their outer hands are in *vitarka-mudrā*; their hands near the Buddha have fingers in same position, but are held out or before the body, with palm uppermost. Four haloed shaven disciples stand behind the Buddha. Rest of company consists of usual Bodhisattvas, dancer, and musicians; with subsidiary Buddhas and Bodhisattvas in bottom corners; a large peacock before dancer; and a white crane (?) and two Garuḍas on rocks rising from lake in foreground.

Musicians and Garuḍas play on clappers, mouth-organ (teapot-shape), lute, pipe, flute, and psaltery; all of same type as in *Ch. lii. 003. A beribboned lute and mouth-organ also float between roofs of celestial mansions above. In upper story of the middle pavilion appears a small seated Buddha; two others rise on clouds at side. Very little of lake seen; no infants rising from it and no lotuses or trees.

Colouring well preserved, though somewhat hard and opaque owing to solidity of paint; drawing of conventional style and without special distinction. Flesh of the three Buddhas gilded, as are also altar-vessels; much of gilt remains. Flesh of Bodhisattvas, dancer, and musicians white shaded with light red. Chief colours otherwise, intermingled crimson, blue, and green, no one hue predominating.

The *side-scenes* (see *Ch. 0051), treated in usual secular Chinese style, represent on R.:

(i) Former incarnation of Ajātaśatru, as a hermit, being beaten outside door of his hut by man with stick; (ii) former incarnation of Śākyamuni, as white rabbit, pursued by huntsman on horseback, with falcon; (iii) Bimbisāra worshipping the Buddha, who appears on cloud; setting of this and all following scenes on R. is a verandahed gallery in background, with verandahed pavilion alternately on R. or L.; (iv) Bimbisāra and Vaidehī kneeling with hands in adoration and listening to discourse of Maudgalyāyana, who sits before them on platform in guise of monk; (v) Ajātaśatru pursuing Vaidehī with sword (almost effaced); minister in profile in foreground, also with sword; (vi) Vaidehī taking food to Bimbisāra; she is walking in courtyard with golden wreath in her hand, evidently garland from which she gave him drink; see also Ch. lv. 0033. *v*; (vii) Ajātaśatru on horseback, in courtyard, meeting man who bows before him; cf. *Ch. 0051, scene v, etc. In foreground wall with closed door, and two warders outside with axes over their shoulders.

On L., Queen Vaidehī meditating on *Sukhāvatī*, as follows: (viii) on Setting Sun, two rays of which fall upon her face (ix) on Water as ice (?); sq. white enclosure with black marks as in Ch. liii. 003. *x*; lv. 0033. *x*, etc.; (x) on Flowery Throne (?), a lotus growing in tank; (xi) on Lake of Eight Virtues (?), a sq. indigo tank enclosure within chequered border; (xii) on Ground of *Sukhāvatī* (?), a block of variegated cubes: cf. Ch. 00216; lv. 0033. *xi*; (xiii) on jewelled canopy, three-tiered; (xiv) on Jewel-tree, supporting another canopy; (xv) on Mansions of *Sukhāvatī*, represented by pavilion; (xvi) on monk, unhaloed and shaven, seated on mat—Maudgalyāyana or Ānanda (?); (xvii) on Avalokiteśvara or Mahāsthāma; (xviii) on Buddha Amitābha, almost effaced.

Costumes, etc., as in *Ch. 0051; but the Queen's hair is done in a small top-knot, with plain gold fillet finished with three upright elliptical orns. in front.

Bottom of painting occupied by dedicatory inscr. on central panel, and kneeling donors, four men on R., four women on L., with separate small inscr. by each. Dresses, head-gear, and coiffures plain, like those of Ch. xxxviii. 004 (q. v.); but whole, including inscription, almost effaced.

5′ 6″ × 3′ 11″. Reproduced in *Journal of Indian Art*, Oct. 1912, vol. xv, New Series, No. 120, Pl. IV.

Ch. lvi. 001–10. Ten painted silk banners, forming a very distinctive class, primitive in style, and akin, but much inferior in execution, to series *Ch. lv. 004. Cf. illustrations of Nepalese MSS. in Foucher, *Étude sur l'Iconographie bouddhique de l'Inde*, i. Pl. IV–VI, which these paintings much resemble in style of painting and type of jewellery and garments.

All are painted on pale grey silk, edged at sides with somewhat darker silk; head-pieces and side streamers in all cases lost, though a few traces of bottom streamers remain. Subject always a single fig., standing squarely on both feet and facing spectator, on single large lotus; one arm usually in attitude of charity or protection, the other carrying an attribute.

The fig. short-bodied with slender waist, rounded hips, and long thin arms and legs, the latter exceedingly stiff and straight. Face long and round-chinned, with broad nose, level eyes, and turned-up mouth; but owing to lack of skill in drawing the features are exceedingly irregular in form and position. All have elongated ears and *ūrṇā*. The hair falls on the shoulders in thin straggling locks or ringlets, and shorter locks wave by side of ears, outlining face. Top-knot usually hidden by tiara, but beneath its lower edge the hair appears on forehead in bandeaux or a fringe of short curls. The feet are large, shapeless, cushion-like appendages, broadest across toes, and joining oddly on to meagre legs. Flesh painted white, green, or yellow, according to divinity represented; soles of feet, palms of hands, and all outlines usually indicated in red. Eyes white, with large black pupils, often very effective.

All wear practically same dress and ornaments, former

consisting of *dhōtī* and narrow stole passed round shoulders and hanging upon arms. Sometimes a narrower stole set with metal ornaments is found also, hanging from shoulders; a girdle of drapery knotted upon hip. Striped materials are always used for *dhōtīs*, broader bands of colour being inwoven with mingled threads of other hues or with spot or flower patterns. The stole is of contrasted colours on reverse sides, usually with spot pattern on each, and like *dhōtī* has fringed ends. Latter garment drawn closely round legs, seldom reaching below knee, and held round waist by belt, the long end then falling in conventional folds between legs. The narrow stole leaves upper part of body practically bare.

Jewellery heavy and comparatively simple in style, its most distinctive feature being the tiara, which is practically the same in all. It consists of gold circlet, set in front with three massive triangular ornaments, chased and jewelled and resembling tiaras of 'Indian' paintings *Ch. lv. 004, etc.; but the ornaments adjoin each other, giving a still more solid effect. Necklace consists of heavy collar, set sometimes with central jewel and pendants, sometimes with row of jewels; the most elaborate have also row of pendent jewels beneath. Ear-rings in all cases take form of jewelled rosettes; bracelets are plain hoops usually set with single large jewel. Armlets of corresponding type are found in two (Ch. lvi. 002, 0010). Halo circular in lvi. 002 and 004, but in others oval; formed in all cases of variegated rings of colour of different widths. Canopy represented by straight or drooping band of drapery, occasionally decked with tassels and pendants.

General style of work very primitive; drawing clumsy, even grotesque, the lines on the two sides corresponding but rudely. The range of colour is simple, comprising two shades of pink, red, blue, green, white, yellow, and black; tints themselves coarse and muddy. An attractive feature of the figures is the naïveté of their expression, which is varied and speaking. It is often very different on two sides of same painting, and on these many variations of detail are also found.

Ch. lvi. 001. Subject: *Avalokiteśvara*. Head $\frac{3}{4}$ L., slightly bent; R. hand in *vara-mudrā*; L. raised carrying pink lotus. *Dhōtī* striped light red and yellow interwoven with flower and line patterns in yellow, red, and white, and divided by narrow bands of green, pink, and unpainted buff of silk; stole green spangled with yellow (rev. unpainted buff of silk spangled with white and dark red). Seated Buddha on front of tiara, but this and jewels left same yellow as setting. Fig. short-bodied, and slender in waist. Flesh white, but paint mostly gone. Halo oval, green drapery of canopy above, and underfoot single lotus of yellowish red. Remains of buff silk streamer below. Painting 1′ 9″ × 5$\frac{3}{8}$″, length with streamer 1′ 11$\frac{1}{2}$″.

Ch. lvi. 002. Subject: *Bodhisattva Vajrapāṇi*. R. hand in *vara-mudrā* by side; L. horizontal before breast supporting the Vajra which stands on end. *Dhōtī* of dark red, yellow, light blue, and white interwoven. No stole. Girdle of dark red, with flower pattern in white and yellow, passed round hips and knotted on L. Narrow band of white comes over R. shoulder and crosses under girdle, ends on thigh. Short curls wave at side of head, making background to ears. Flesh a uniform green, with palms of hands and edge of soles of feet red. Fig. somewhat heavier than majority of this class. Underfoot, double dark-pink lotus, from which twining stems with buds and flowers rise shoulder-high on either side. Halo circular. Overhead, straight band of canopy, red with pattern of large flowers in blue, white, red, and green, and pendent tassels. For Tib. inscr. written on background to L. of head, see App. *K*.

Top of painting and all accessories lost. 1′ 9$\frac{1}{4}$″ × 5$\frac{1}{2}$″. Pl. LXXXVII.

Ch. lvi. 003. Subject: *Avalokiteśvara* (Padmapāṇi ?). Head $\frac{3}{4}$ L., slightly bent; R. hand in *abhaya-mudrā*; L. hand by thigh carries long-stemmed pink lotus. *Dhōtī* of striped dark green, pink, and red interwoven with yellow and blue; stole red, spangled with yellow; on reverse side, blue spangled with white. Flesh white shaded with pink, outlines dark red. Halo oval. Underfoot dark pink lotus, and overhead remains of red canopy with white flower spots. Paint well preserved. L. top corner and all accessories lost. 1′ 8″ × 5$\frac{1}{2}$″. Pl. LXXXVII.

Ch. lvi. 004. Subject: *Avalokiteśvara*. Head $\frac{3}{4}$ L., slightly bent; R. hand in *vara-mudrā*, L. raised holding long-stemmed double pink lotus. *Dhōtī* striped red, green, pink, and blue, interwoven with white and yellow; stole red (rev. green) spangled with yellow. Narrow band of dull pink cloth set with occasional jewelled gold rosettes hangs from shoulders upon breast. Representation of Dhyāni-buddha in meditation on central orn. of tiara, and white lotuses at ears. Flesh painted white (much lost), with palms of hands and edge of soles of feet red. Halo circular. Underfoot double lotus, petals alternately dull pink and green; overhead remains of canopy of red cloth with dark red and yellow spot pattern, pendent tassels and lotus buds. To L. is Brāhmī inscr. on background.

Top of painting and all accessories lost. 1′ 9″ × 6″. Pl. LXXXVII.

Ch. lvi. 005. Subject: *Mañjuśrī* (?). Head $\frac{3}{4}$ R., slightly bent; hands low before body, R. in profile with thumb bent, apparently intended to grasp stem of lotus, which however disappears unsupported behind wrist; L. carrying lemon in hollowed palm. Pale pink double lotus, full-blown, rises above shoulder supporting book. *Dhōtī* of striped blue and red with spot patterns in white and yellow, divided by narrower stripes of pale pink and green. Stole of green spangled with yellow; reverse side pale pink and white. Necklace a row of round jewels in narrow circular settings, with a lozenge-shaped jewel dependent from each. On back side fewer pendants shown. Flesh a uniform yellow; inside of R. hand red. Halo oval, with remains of blue drapery of canopy behind; underfoot pink single lotus (colour much gone). R. top corner and all accessories lost. 1′ 9$\frac{1}{4}$″ × 5$\frac{3}{4}$″.

Ch. lvi. 006. Subject: *Mañjuśrī* (?). Head $\frac{3}{4}$ R., slightly bent; R. hand in *abhaya-mudrā*, L. low before body

carries full-blown blue flower, stemless, in hollowed palm. *Dhōtī* of striped dark red, green, and yellow interwoven with white and pink, the end showing spot pattern in white; stole dark green (reverse side red) spangled with yellow. Flesh yellow with dark red outlines. Face heavy and peculiarly irregular in features, the mouth being placed well to R. of nose. Eyes cast slightly up; corners of mouth level. Oval halo, with remains of drapery of canopy (green spangled with yellow) behind. Underfoot single dark red lotus. Other side of painting shows great divergence from front, eyes being downcast and corners of mouth upturned, giving an entirely different expression. Details of colour and pattern in dress also different. Incomplete top and bottom, and binding gone from sides; all accessories lost. 1′ 8″ × 5½″.

Ch. lvi. 007. Subject: *Mañjuśrī* (?). Head ¾ R., slightly bent; R. hand by side as in *vara-mudrā*, but with second finger bent; L. raised, carrying blue lotus. *Dhōtī* predominantly pink, with interwoven green, blue, yellow, and red; stole, red spangled with yellow (reverse, blue spangled with white); narrow band of chequered pink material hanging on breast from shoulders. Flesh deep yellow. Irregularity of features almost grotesque, but downward cast of large eyes and extreme crookedness of upturned mouth give face an almost pathetic expression of considerable charm. Halo oval; underfoot, double lotus, petals alternately dark blue and red; above, canopy of red-patterned drapery with jewelled tassels and pendants. On back minor differences noticeable, including fringe of small curls on forehead in place of smooth bandeaux. All accessories lost; silk of coarser quality than the rest. 1′ 9¼″ × 6½″.

Ch. lvi. 008. Subject: *Avalokiteśvara* (?). Fig. small and straight-bodied, with very slender neck and long arms, giving childish appearance. R. hand in *abhaya-mudrā*; L. in *vara-mudrā*. *Dhōtī* red and green, divided by narrower bands of light pink and blue and interwoven with yellow and red; stole, green spangled with yellow (reverse light pink and white). Face a full oval with downcast eyes almost closed and gentle expression. Flesh yellow shaded with light red. Oval halo, with red-spangled drapery of canopy above; underfoot single red lotus. On back, R. hand (now L.) is not raised at breast, but held horizontally, carrying red-edged lotus flower on palm; features are placed lower on face, giving it smaller and still more youthful air. Corners and all accessories lost. 1′ 5″ × 5½″.

Ch. lvi. 009. Subject: *Mañjuśrī*. Head turned slightly to R.; R. hand carries sword over shoulder, L. hangs by side in *vara-mudrā*. *Dhōtī* of striped pale yellow and red with floral patterns in reverse colour, divided by bands of pale pink and green; stole, light blue spangled with white (reverse red spangled with yellow). Jewels in ornaments left yellow like setting. Flesh brownish yellow shaded with red. Face round, with alert cheerful expression. Halo oval. Underfoot single yellow lotus tipped with red. On back, face more serious; extra ringlets descend on each side between ear-rings and neck. Torn round edge, and all accessories lost. 1′ 8″ × 5¼″. Pl. LXXXVII.

Ch. lvi. 0010. Subject: *Mañjuśrī*. Head ¾ R., slightly bent; R. hand in *vara-mudrā*; L. raised carrying a double lotus of deep bright blue. *Dhōtī* of striped yellow and dark green with narrow bands of blue and pink, and interwoven with blue, white, and red; girdle dark red spangled with yellow, passed round hips and knotted on L. hip; stole, of same blue as lotus, crosses breast from R. shoulder, long end hanging behind R. arm, short end brought over shoulder again from behind. Orns. include armlets; all are richly jewelled, but less elaborate on back than front of painting. Long chain of gold beads, set with three large jewels, crosses fig. from R. shoulder to L. thigh. Flesh yellow, moulding of cheeks and forehead on back of picture being crudely indicated by red. Feet show touching-up and correction by more skilful hand than original artist. Halo oval; remains of green canopy above; underfoot single lotus of dark pink. Minor differences in colour, pattern, draperies, etc., on back. Broken at top; remains of grey silk bottom streamers preserved. Painting 1′ 8½″ × 5¼″, length with streamers 2′ 1″.

Ch. lvi. 0011. Wooden statuette of Buddha seated in meditation on lotus. Feet invisible, hands in lap; no vesica or nimbus. Lotus throne painted black on outside of petals, red on edges and inside. Outer garment red with very large black check, falls over shoulders leaving chest bare, and showing black under-garment which passes from over L. shoulder under R. arm. Chest, face, and hands once yellowish white, now dull brown. Hair, eyes, and eye-lashes black; lips red. Fig. leans back slightly, and head is bowed into perpendicular. Good careful work; tool-marks left to give sharpness to drapery, but smoothed away from flesh parts. Cracked along back. H. 3⅝″; across shoulders, 1½″. Pl. XLVII.

Ch. lvi. 0012. Terra-cotta relief plaque of seated Buddha. Whole framed in oblong border having rounded top and rising flush with highest points of relief. Buddha seated in European fashion with hands folded in lap. Two horizontal beams projecting on each side at level of knees, and other two at level of footstool, represent throne. Feet rest on footstool of lotus petals (two rows, upper pointing up, lower down). Vesica, from hips upwards, and nimbus, both decorated with radiating lines in relief, show abundant traces of colour, now brown, once prob. deep red. Hair has lost colour; robe light red; all colour worn off face, knees, throne, and footstool. Border unpainted. Careful work and very sharp impression. 3½″ × 2$\frac{3}{16}$″ × ½″. H. of fig. 2⅛″. Pl. CXXXIX.

Ch. lvi. 0014. Large silk painting with Chin. inscr., representing *Thousand-armed and Eleven-headed Avalokiteśvara* (Kuan-yin), seated, with attendant divinities. Complete and in good condition, with brown silk outer border and inner painted border of continuous lozenge pattern.

For general design, and treatment of central fig., cf. *Ch. 00223, and especially Ch. lvi. 0019. Background in lower half of picture here green to represent lake, from which Avalok. and his attendants rise on clouds of dark purple vapour. That of upper half is light blue for air, in which

hang small groups of attendant Buddhas on clouds, white, green, and red, and jewelled crimson canopy of central fig.

Inscriptions in upper half are mostly legible, and allow the following figs. to be identified: (i, ii) in upper corners, R. and L. resp., small *Bodhisattvas of Sun and Moon.* Horses and geese do not appear, deities being seated on lotuses; but their distinctively coloured haloes remain—Sun's orange-red, Moon's white.

(iii, iv) *Buddhas of Ten Quarters of Three Worlds* (past, present, and future), a group of five seated on each side of Avalok.'s canopy.

Below comes main group of attendants, standing, four armed Kings on each side, and beneath each quartet a dignified fig. in Chinese official dress but haloed, holding long-handled fan and attended by two boys. The inscrs. show these to be: Kings in upper row, on R. (v) *Virūpākṣa* and (vi) *Virūḍhaka*; on L. (vii) *Vaiśravaṇa* and (viii) *Dhṛtaraṣṭra*; armed figs. below, on R. (ix) *gods of earth* (?), on L. (x) *gods of fire* (?); personages in official dress, on R. (xi) *Brahmā*, on L. (xii) *Indra.*

Inscriptions in two latter cases at least were added after painting was finished. Brahmā has sq. black head-dress like magistrates' of *Ch. 0021, and typically long narrow Chinese beard, moustache, and whiskers; Indra has coiffure and tiara of Bodhisattva. Boys wear long white under-robes and wide-sleeved crimson jackets; hair tied in two bunches on top of head.

In centre foreground a large draped altar, with sacred bronze vessels. In lake behind it stand two small *Nāgas* (xiii, xiv), supporting each with upraised hand purple cloud on which rises white disc enveloping central fig. Nāgas here are in armour like Lokapālas of banners (see Ch. 00107), and bear no emblems of their serpent origin.

On either side of altar stand with hands in adoration: on R. (xv) white-bearded *Sage*, on L. (xvi) *Nymph of 'Shining Virtue'* (see *Ch. 00223). Nymph wears Chinese women's dress and coif-like head-dress as in Ch. 00105.

Lower corners are filled by usual demonic 'fire-headed' *Vajrapāṇis* (xvii, xviii), brandishing customary emblems, against background of flame; but that on L. is almost entirely destroyed.

Inscriptions relating to last six figs. are almost illegible, but identity of deities can be fixed by comparison with other paintings of the series, especially Ch. lvi. 0019.

As regards workmanship, painting is not absolutely of finest quality, but with its still vivid pink, blue, and deep purple, and luminous white disc enclosing central fig., forms striking piece of colour design.

5′ 11″ × 4′ 3″. (Inscriptions read by Mr. Yabuki.)

Ch. lvi. 0015. Silk painting representing *Avalokiteśvara* (Kuan-yin) seated on island under willows, with donors. Complete except for border, and well preserved.

Avalok. sits upright ¾ R. on edge of flat rock rising on many-petalled base from lake. R. foot pendent rests on lotus rising from water; L. doubled up and thrust under R. thigh; R. hand holds upright flask, L. willow branch; both arms held stiffly forward from elbows. Dhyāni-buddha in trilobate setting on front of tiara.

Flesh white with red outlines, hair and eyes black, fig. rounded in outlines. Circular halo and vesica enclosing fig. to knees. From water grow other lotuses pink and white; low banks of lake are represented by zigzag bands of white and black to R. and L. In background are conventional willows, and overhead a conventional flower spray making canopy. Indian tradition is preserved in Avalok.'s accessories (dress, jewellery, and coiffure; see *Ch. lv. 0014); but general treatment and style of drawing are Chinese.

Donors below consist of man seated cross-legged on L., holding lotus-blossom, with small boy standing behind; and monk in same attitude on R., holding censer, with acolyte standing at back. Dress of man as in *Ch. 00102, of monk as in xlvi. 0013, etc.; little boy in tunic and long trousers with hair in two bunches at sides of head as in Ch. liv. 006; monk and acolyte with close-cut hair painted black on head, and monk even with tufts of beard and moustache.

Blank panel and cartouches for inscr. between donors and in R. top corner. Colouring scarlet, white, black, and a little yellow, with olive-green scenery and background. Workmanship mediocre.

For only similar representation of Avalok. see Ch. i. 009.

2′ 3⅝″ × 1′ 7⅝″.

Ch. lvi. 0016. Large silk painting representing *Avalokiteśvara* (Kuan-yin), standing, without attendants. Both ends of painting, with upper half of head and whole of fig. below knees, lost; remainder fairly preserved. Fig. stands ¾ L., both arms raised from elbows; R. hand holding flask, L. the spray of weeping willow. Workmanship clean and sure, and painting, so far as preserved, very good example of finished 'Chinese' style of Bodhisattva. Dress, ornaments, and hair of *Ch. 002 type; face and arms delicately drawn, with rounded contours. Flesh white, shaded with pink; *dhōtī* or skirt orange-red, under-robe crimson, stole olive-green, metal-work red-brown outlined with black and yellow. Round neck, in addition to necklace, is small string of beads worn by the Six-armed Avalokiteśvara; see *Ch. 00102. On L. upper edge blank yellow cartouche for inscr.

3′ 6″ × 1′ 9¾″. *Thousand Buddhas*, Pl. XIX.

Ch. lvi. 0017. Large silk painting with Chin. inscr., representing *Kṣitigarbha* in guise of monk, as Lord of the Six Gati. Upper L. quarter lost, and replaced by painted paper; condition otherwise fair. Cf. other representations under *Ch. 0021.

K. sits on lotus, ¾ L., cross-legged and feet hidden; R. hand lying open on knee, L. held horizontally before breast, fingers extended and palm down. Dress: green under-robe, necklace, and crimson mantle lined blue and barred with yellow arranged as in *Ch. 0021, etc. Flesh white, shaded and outlined with red; eyes quite straight but long and narrow, with heavily marked black eyebrows; ear normal; shaven head painted dull blue; small moustache and wisp of beard, outlined in black; on forehead, *tilaka* from which rises cloud of vapour. Circular halo and vesica of plain olive-green and red; clumsy conical canopy above, from which hangs deep draped shade.

From K.'s person emanate on each side three clouds, on which stand figs. emblematic of Six Worlds as follows: on R. above (i) Bodhisattva for World of Gods, (ii) horse for World of Animals, (iii) demon stirring caldron for World of Demons; on L. above (iv) four-armed deity holding up discs (of Sun and Moon?) for World of Giants (?), (v) a man (in Chin. dress) for World of Men, (vi) a *preta* for World of Tormented Spirits. The meaning of all except (iv) and (vi) is established by small inscr. placed beside each fig., the cartouche of (vi) having been lost with L. edge of painting, while fig. (iv) is redrawn without inscr. on paper patch.

Lines drawn for dedication panel on lower edge of painting, but inscr. not filled in.

Painting mediocre as work of art. 4' × 1' 9⅜".

Ch. lvi. 0018. Large silk painting representing *Paradise of Amitāyus*, with side-scenes showing legend of Ajātaśatru and meditations of Queen Vaidehī, as in *Ch. 0051. In general conception and treatment similar to *Ch. lii. 003, but 'Indian' style more apparent in certain figs. Complete at top and sides except for border; incomplete at bottom, and most of middle of picture lost except immediately round central Buddha. Remainder in good condition.

The pose of presiding Buddha is the same as in Ch. v. 001. The two chief Bodhisattvas sit European fashion, leaning their bodies forward; both wear 'Indian' type of Bodhisattva dress, orns., and coiffure, descr. under *Ch. lv. 0014; their flesh painted bright flesh-pink shaded with salmon. Their eyes, however, are oblique; their hair black, and their haloes and vesicas circular. The one on L. holds Vajra upright on his L. hand, and is obviously Vajrapāṇi; the other prob. Mañjuśrī, the second Bva. associated in triad strictly with Amitāyus; see Ch. lvi. 0034. He holds the *ghaṇṭā*, or Vajra-topped bell.

Attendant Bodhisattvas mostly hold scarlet lotus buds, but in Mañjuśrī group one shown with fly-whisk and another with Pōthī. At M.'s shoulder sits youthful male fig. with Bodhisattva dress and necklace, but with black hair curling closely over his head and no top-knot or tiara.

Celestial mansions built in form of rectang. courtyard with high-roofed gateways at middle of sides, and at back corners two high towers crowned by small shrines containing Stūpas. Two Garuḍas playing on pipe and lute stand in court, with duck and phoenix painted conventionally scarlet and light blue. Small Buddhas and Bodhisattvas rise on clouds into sky, in which float beribboned musical instruments, while precipitous mountains are shown at the sides.

Below the dancer is lost, but orchestra of four remains, playing on flute, mouth-organ (or syrinx), lute, and pipe. On gangways going down into water stand a crane and a Garuḍa carrying purple lotus at his breast and red lotus bud in his mouth. The bottom corners, with subsidiary Buddhas and their attendants, are also partially preserved. Very little of lake is seen, no infants appearing in it nor trees.

Workmanship and drawing in style of *Ch. lii. 003, but not on quite so high a level or so well preserved. Colouring gay, enlivened by plentiful blue and copper-green on ornamental lotuses, haloes, canopies, and trees in addition to fundamental colouring of crimson, dull green, white, and black. As in Ch. lii. 003, the last used only for hair of all secondary figs., pavilion roofs, and floor of main terrace. Flesh of all Bodhisattvas in main group white shaded with pink; that of Garuḍas and musicians flesh-colour. The four varieties of tree descr. in Ch. lii. 003 also found here.

The *side-scenes* (see *Ch. 0051) are in usual secular Chinese style, and exceptionally numerous. They represent on R.:

(i) Former incarnation of Ajātaśatru, as a hermit, being beaten outside his hut by dismounted horseman with stick; (ii) former incarnation of Śākyamuni, as white rabbit, pursued by huntsman who shoots arrow at him; (iii) Bimbisāra and Vaidehī kneeling before Ś., who appears seated on a Padmāsana; (iv) Bimbisāra kneeling, Vaidehī throwing herself on her face, before standing Buddha (Amitābha), from whose head stream rays of light; (v) Ajātaśatru pursuing Vaidehī with sword; Candraprabha and Jīva, with swords, in foreground, ready to intervene; (vi) Ajātaśatru receiving minister who remonstrates with him on his treatment of his mother (?); cf. Ch. lv. 0033. *iv*, etc.; (vii) Vaidehī visiting Bimbisāra in prison, and Maudgalyāyana descending on cloud in shape of monk; (viii) Vaidehī between two warders, sentenced to imprisonment by Ajātaśatru (?); (ix) Vaidehī led away by two warders.

On L., meditations of Queen Vaidehī on *Sukhāvatī*, as follows: (x) on Sun; lost, but its rays fall upon her; (xi) on Water; a green enclosure within chequered border; (xii) on Water as ice (?); white enclosure with black marks as in liii. 003. *x*, etc.; (xiii) ? white disc within green enclosure like xi; cf. Moon (?) in Ch. xxxiii. 003. *viii*, and lv. 0033. *viii*; (xiv) on Ground of *Sukhāvatī* (?); a sq. green enclosure divided into four; (xv) on jewelled canopy, three-tiered; (xvi) on Rebirth in *Sukhāvatī*; her own soul in guise of Chinese woman rising from lotus; cf. also Ch. xxxiii. 003. *xvi*; lv. 0033. *xix*; (xvii) on Jewel-tree; (xviii) on Mansions of *Sukhāvatī*, represented by a pavilion; (xix) on Avalokiteśvara or Mahāsthāma; (xx) on Buddha Amitābha or Amitāyus, standing; (xxi) on same, seated on Padmāsana; (xxii) on Mahāsthāma or Avalokiteśvara; (xxiii) on Rebirth in *Sukhāvatī*; a naked infant within pointed nimbus rising from lotus; (xxiv) on same, mostly destroyed.

The Queen's hair on R. is done in high loops as in *Ch. 0051, on L. in plain top-knot. Blank cartouches for inscriptions, terra-cotta, yellow, and white, are placed by each scene. 5' × 3' 10".

Ch. lvi. 0019. Large silk painting with Chin. inscr., representing *Thousand-armed and Eleven-headed Avalokiteśvara* with attendant divinities. Most elaborate representation of this subject in Collection; complete (except along bottom), with orig. border of fawn silk, colour finely preserved.

For general design, list of similar paintings, and treatment of central fig., cf. *Ch. 00223, and especially Ch. lvi. 0014. But attendant deities are here more numerous, and can mostly be identified with certainty owing to inscriptions. They are as follows:

(i) In upper corners on each side group of five small

Buddhas, representing 'all the Buddhas of the ten quarters of the Universe'. Their flesh yellow, their hair blue; they sit with legs folded and hands in various familiar *mudrās*.

(ii–iii) At top above Avalok.'s canopy *Bodhisattvas of Sun* (on R.) and *Moon* (on L.), seated resp. on their five white geese and five white horses, with hands in adoration; disc of Sun orange, of Moon white.

(iv–vii) On either side of upper part of Avalok.'s halo of hands, pair of divinities with elaborate flower-decked vesicas and haloes, seated on ornate Padmāsanas. The two inner represent: on R. (iv) *Bodhisattva Ṛddhicakra* (?), four-armed, who sits with R. knee raised in attitude of 'royal ease', upper R. hand supporting head, lower R. hand holding sacred jewel; upper L. hand balancing wheel on forefinger, lower L. hand in *vitarka-mudrā* at breast. On L. (v), the *Bodhisattva Amoghapāśa* (?), triple-headed and six-armed; upper hands holding scarlet lotus and flaming jewel, middle hands flask and Pōthī (strings loosened and boards apart), lower in *vitarka-mudrā* or resting on knee.

These two figs. wear ordinary Bodhisattva dress, and their flesh is brownish coloured. But other two have white complexions with pink cheeks, no top-knots, but black hair falling on their shoulders, and solid caps of gold-work covering whole top of head. They wear also voluminous robes covering them from ankle to wrist, and set at top by flowered band into plain yoke which covers breast and shoulders to base of neck. Both kneel with bowed heads offering platters of flowers. The inscriptions on R. and L. describe them respectively as (vi) the one '*who anoints with incense*', and (vii) the one '*who scatters flowers*'.

Beneath them come: on R. (viii) *Indra* with three attendants, and on L. (ix) *Brahmā* with two. All these wear Chinese official dress: long skirts and wide-sleeved coats with white inner robe standing up round neck. Their heads are bare; their black hair gathered up and tied in two bunches on top. Brahmā and Indra furthermore have gold comb or toothed orn. curving backward from this top-knot, and a scarf or ribbon dressed outwards in loops down back of head. Indra also has thin drooping moustache and narrow beard. All kneel, Indra holding censer, Brahmā dish of scarlet lotus.

Beneath again come two monstrous divinities: on R. (x) *Maheśvara*, and on L. (xi) *Mahākāla*. Former seated cross-legged on back of bull, which is blue spotted with white, and is lying down. He has three heads (one greyish blue) and six arms, wears Bodhisattva dress, and is of ordinarily beneficent aspect. On his L. knee (prob. through his connexion with beneficent aspect of Śiva, as god of creation) he holds small human fig., who carries red ball on his outstretched hand. Maheśvara's upper L. hand holds flaming trident; lower is outstretched empty. His upper and lower R. hands hold ball and conch-shell; middle one rests on his thigh.

Mahākāla (demonic form of same deity) is also three-headed and six-armed; his flesh brown shaded with blue. He stands with legs apart upon crocodile-jawed snake with skulls under his feet, and wears only tiger-skin loin-cloth and short crimson breeches besides necklet, chain, and tiara orn. with skulls. He is tusked and has a shock of crimson hair standing up from head and shoulders. With his upper hands he holds out by forepaws huge elephant-skin cloak which makes background to his fig., mask drooping over his head. His lower hands are placed akimbo on his hips; middle hands outstretched grasping each a pike whose end rests upon ground, and the cords imprisoning two half-naked human figs., who stand on either side with hands tied behind their backs.

All the foregoing figs. supported on clouds, floating in air. Below come larger groups of attendants, who occupy ground in bottom corners.

First of these are two emaciated *pretas*, who stand with upturned faces and outstretched arms immediately under Avalok.'s Padmāsana, the one on R. clad in patched and ragged coat and broken cloth boots; one on L. only in white loin-cloth. Both clutch at showers of white grains which Avalok. pours on them from hands upon his knees. The inscriptions describe them respectively as: on R. (xii) 'the *preta* who is given the seven jewels' (*Saptaratna-dāna-preta*), and on L. (xiii) 'the *preta* who is given ambrosia' (*Amṛtadāna-preta*).

Behind come main groups of attendants, central fig. in each case being female divinity of beneficent aspect seated on bird.

On R. (xiv) she rides upon phoenix, and is four-armed; but three arms only are visible, holding up (R.) the willow, (L.) the rosary (?), and (at breast) the flaming jewel. Behind her stands (xv) a *Buddha* with blue hair and *uṣṇīṣa*, and third eye in middle of forehead. He wears purple under-robe and yellow mantle with scarlet flowers, and has R. hand in *vitarka-mudrā*; L. invisible. Behind him is (xvi) female deity (Hāritī ?), head and shoulders only visible, carrying child in crimson flowered robe on her R. shoulder, and another on L. arm. Beside them march two Kings (xvii and xviii) in armour, one carrying sword. Before feet of latter sits aged and emaciated Sage (xix), familiar from *Ch. 00223, etc. Only two inscriptions are attached to this group. Of these one, applied to phoenix, reads 'Gold-winged bird'; the other, relating to Sage, is obliterated. The other deities cannot be identified with certainty, but (xiv) perhaps represents *Sarasvatī*, and (xvi) prob. *Hāritī*.

Group opposite on L. corresponds in number and pose of figs., but principal deity (xx) is three-headed and four-armed, and rides on peacock. Two of her hands hold up long narrow staff or needle-like blade and bunch of grapes; the third, a bell; the fourth, a white cock at her breast. She has no top-knot, and her hair straggles in black locks on her shoulders. From the inscr. she appears to represent Marīcī (?). Behind her stands (xxi) female attendant without attribute, and behind again (xxii) warrior King in helmet, but also without attribute. Beside walk two more Kings: (xxiii) *Vaiśravaṇa* with two-bladed pike and Stūpa, and (xxiv) with sword. In front kneels (xxv) the flower-offering Nymph of Virtue, customary pendant to Sage. Her dress is a somewhat cumbersome edition of ordinary Chinese woman's dress:

full yellow skirt and crimson over-jacket with cape or wide collar on shoulders, and long wide-falling maroon sleeves. Her hair is done like that of Queen Vaidehī in side-scenes of *Ch. 0051, etc., in two high narrow loops arching over back of head.

Dress of all other fem. divinities (xiv, xvi, xx, and xxi) is that of *vi* and *vii*, but their hair is done in top-knots with tiara, Bodhisattva fashion, except in case of (xx) referred to above. (xxi) appears to wear over her inner robe plain tight-fitting corslet fastened with belt. Armour and equipment of Kings like that of more elaborate Kings in banners (see *Ch. 0010). In physical type and features all are of 'Chinese Buddhist' type as seen in banners of type *Ch. 002, or Paradise pictures of type Ch. lviii. 0011, etc.

Between these groups lies tank, in which stand two short stalwart *Nāgas* (xxvi, xxvii) upholding stem of Avalok.'s lotus. They are in human shape, but with five snake-heads in each case forming crest above their own, and snake-tail curling down their backs; they wear short breeches, stoles, and scarves. Smaller Nāga figs. of same kind stand ankle-deep in front carrying fruit and flowers. In middle (almost destroyed) infant soul rises on lotus.

In bottom corners are demonic *Vajrapāṇis* (xxviii, xxix), six-armed, tusked, and serpent-decked, with skulls on their tiaras, straddling against background of flame and brandishing usual emblems (see *Ch. 00223). At feet of each sits smaller demon with boar's head, in one case black, in the other white. Along bottom of picture ran apparently series of lesser four-armed Bodhisattvas, but of these only parts of two remain—on R. triple-headed god with bell and bow, on L. a single-headed god with Vajra. Only four inscriptions are attached to these groups, referring to Vajrapānis and their boar-headed attendants. Reading of one is doubtful, and the others are merely epithets.

Apart from its iconographic importance, the painting as a piece of colour is one of finest and best preserved in Collection. In detail the drawing is of conventional type, skilfully executed but without marked individual character; but in its main lines the composition lends itself to specially effective colour treatment. This is based on two colours only—pinkish red and a deep ultramarine (?) blue. Large halo of hands forms central disc of former colour, while the blue forms background throughout.

On it the various groups are painted chiefly in red, pale blue, dull green, and white, robes of central fig. and many of smaller deities being a particularly rich flowered crimson. Faces and hands of most of figs. pale brown; Avalok.'s own a yellowish flesh-colour shaded with glowing red, his hair the blue of background. 7′ 1″ × 5′ 6″. Pl. LXIII; *Thousand B.*, Pl. XVII.

Ch. lvi. 0020. Miniature painted linen canopy. Linen square, with knotted linen tags at corners (two lost), and red linen suspension loop in middle on top side. This side painted in imitation of draped and tasselled canopy spreading from square centre-piece. Under-side painted with four Buddhas seated in meditation on lotuses, heads to centre. Colouring red, green, yellow, and grey. For others, see Ch. 00381. 12″ × 11″.

Ch. lvi. 0021. Painted linen banner; one of set enumerated under *Ch. liv. 008. Similar accessories, colouring, and workmanship, but somewhat larger than the Bodhisattva banners. Good condition.

Subject: *Buddha*, standing facing spectator; R. hand in *vitarka-mudrā* at breast; L. horizontal below it, back uppermost, fingers half curled up. Brownish green under-robe with maroon border; crimson mantle barred with slate-blue, drawn slightly over R. shoulder; flesh dirty yellow; hair black. Copper-green on halo border and head-piece.

Painting 2′ 4″ × 8″, length of whole 5′ 10″. Pl. LXXXIX.

Ch. lvi. 0022. Painted linen banner; one of the set enumerated under *Ch. liv. 008. Similar accessories, colouring, and workmanship. Good condition.

Subject: *Bodhisattva*, standing facing spectator; R. hand in *vitarka-mudrā* at breast, L. below it with hand drooping and palm turned outwards.

Painting 1′ 5″ × 7″, length of whole 3′ 9″. Pl. LXV.

Ch. lvi. 0023. Painted linen banner, with head-piece border and remains of side streamers of faded yellow linen. Fair condition.

Subject: *Avalokiteśvara*, standing facing spectator; R. hand holding willow spray over shoulder; L. by side, carrying rosary; large Dhyāni-buddha on front of tiara. Fig. enormously elongated and long-legged, fig. from waist down measuring almost ¾ of whole. In general type, slim-waisted 'Indian' variety as in *Ch. i. 0016; q. v. for general note and descr. of dress, etc. Cloud over halo, instead of canopy. Colouring red, dingy yellow, and greenish-brown.

Painting 3′ × 6¾″, length of whole 3′ 11″.

Ch. lvi. 0024. Painted linen banner with Chin. inscr., retaining head-piece border and remains of streamers of brown linen. Torn about edges and halo.

Subject: *Avalokiteśvara*, standing ¾ L. with hands in adoration. For general descr. of type and list of similar banners, see *Ch. i. 0016. Grotesque drawing as in Ch. xx. 0012; xxi. 009–10. Colouring only crimson and yellowish brown besides black. Inscr. contains salutation to Kuan-yin.

Painting 2′ 6″ × 6″, length of whole 3′ 4″.

Ch. lvi. 0025. Miniature painted linen canopy. Linen square; no loop or corner tags extant. Top side painted in red, yellow, and brown with imitation of streamered canopy spreading from circular centre-piece; under-side unpainted. For others, see Ch. 00381. 1′ 8½″ × 1′ 7½″.

Ch. lvi. 0026. Nine woodcuts on paper, from upper block of Ch. 00185, pasted together to form single sheet. Pin-holes in four corners. Fair condition; unequal impressions. 2′ 0½″ × 1′ 5¼″.

Ch. lvi. 0027–31. Five paper paintings representing the *Five Dhyāni-buddhas* or Jinas, on coarse whitish paper, cut in triangular shape. 0027, of different series from others, shows edge of second gummed alongside; prob. other four were somewhat similarly joined, forming centre of charm or magic diagram like Ch. 00428.

All seated on lotuses cross-legged, with feet exposed,

soles up; wear 'Indian' Bodhisattva's dress and orns. and five-leaved crown with its seated Buddha figs. (cf. Grünwedel, *Mythologie des Buddhismus*, p. 98). Gauzy patterned materials of dress also characteristically 'Indian': skirts being of scarlet and white lattice-patterned stuff, with grey-blue rosettes printed on top; girdles and scarves across breasts, scarlet spotted with yellow. Jewellery comprises bead necklaces of black and green, besides wide gold necklets, armlets, bracelets, ear-rings, and anklets plentifully set with green, yellow, and red jewels. All except 0027 have also ribbon-like stole spotted with yellow hanging from shoulders to lap. Hair black, done in high cone and falling behind shoulders; faces round, with straight eyes and small features; waists slim and curved. Vesicas are circular, haloes oval with ogre point at top; both are painted in variegated rings of green, grey-blue, or yellow, and whole outlined with scarlet flame. Beneath each, except 0027 (torn), pair of snakes, scarlet or yellow, flying outward, with flaming jewel on head, and open jaws.

0027. Vairocana, on smaller scale than others, with flaming jewel in apex of triangle, and signs of others in adjoining triangles. Holds wheel before breast; flesh yellow shaded with red. Bottom torn off. $8\frac{1}{2}'' \times 5''$. Pl. XCII.

Ch. lvi. 0032. Frs. of painted silk banner, with painted floral head-piece cut in one with picture. All accessories lost.

Subject: *Scenes from the Life of Buddha*, extremely fragmentary. Banner divided into three or four panels by bands of leaf pattern in light blue, and bordered down sides by rosette, wave, or scale orn. in maroon, green, blue, and orange, varied in the alternate scenes. Blank cartouches for inscr. within border, on L.

Scene 1. Destroyed.

Scene 2. *Prince Gautama shooting at the Drums*; cf. Ch. xlix. 006. Four drums appear on a stand on R.; on L. the Prince (head and shoulder only preserved) shooting arrow. Head of another man behind; hills and tree in background. Prince wears red coat, and close black cap.

Scene 3. R. half only preserved, showing man, in white skirt and wide-sleeved red jacket, standing in profile to L. with both arms uplifted. Row of green hills behind him.

Some scattered frs. show broken figs., borders, and dividing bands, which belong to this or to a companion banner. Colouring light and clean; drawing rough and without detail. Main fr. $2' \times 7\frac{3}{4}''$.

Ch. lvi. 0033. Paper painting with accompanying charm or invocation in Chin. Border of angular Chin. wave pattern, left in buff of paper on black ink background; panel within divided horizontally into two sections by band of red. Upper section contains two painted figs.: on R., upon orange cloud, young woman standing facing spectator, R. hand raised holding writing-brush, L. writing-tablet. She is unhaloed; wears green under-robe, and long black and scarlet wide-sleeved jacket, orn. down front with flowers and tied with white girdle under arms. On her shoulders orange tippet; her black hair elaborately dressed with red flowers, yellow hoops, and yellow pins, something like that of women donors of *Ch. 00102, etc. Her skin white, lips and cheeks scarlet, and features carefully drawn. On R. upon green cloud, turning towards her, stands demon with hands in adoration; dress, features, etc., as in silk banners (see Ch. i. 004, etc.). To L. of each yellow cartouche, covered with inscr. in red, addressed to stellar divinity and entreating protection.

Lower section contains charm or invocation also in red, partly in Chin., partly in rectang. signs based on seal chars. $1'\ 4\frac{3}{4}'' \times 11\frac{5}{8}''$.

Ch. lvi. 0034. Large silk painting representing *Paradise of Amitāyus*; with side-scenes showing legend of Ajātaśatru, and meditations of Queen Vaidehī. An elaborate representation, in arrangement and treatment most resembling *Ch. lii. 003, but workmanship not so refined, and now much effaced. Painting also considerably broken; found with coarse linen backing and border (now removed).

Distinguishing features of this Sukhāvatī are the representation of Amitāyus instead of Amitābha as presiding Buddha and the exceptionally Indian treatment of his two chief Bodhisattvas, Vajrapāṇi and Mañjuśrī. The latter are seated in Indian 'Enchanter's pose', with one leg pendent, their heads leaning towards Amitāyus. Their features, dress, ornaments, and hair are like those of 'Indian' banners *Ch. lv. 004, etc.; the striped *laṅgōṭī* covered by gauzy flower-orn. skirts veiling legs to ankles, and their haloes of elongated horseshoe shape. Vajrapāṇi, on R. with dark blue flesh, holds Vajra in his R. hand; Mañjuśrī, on L. white (?), has his R. hand in *vara-mudrā* on his knee, and from his L. resting on Padmāsana rises narrow-petalled blue lotus. Amitāyus' fig., largely destroyed, shows his hands at his breast apparently in a form of *dharmacakra-mudrā*.

The attendant Bodhisattvas, nymphs, musicians, dancer, Garuḍa, and accessories are all as in *Ch. lii. 003; but in place of armed Kings in bottom corners are two subsidiary seated Buddhas with attendant Bodhisattvas. No infants appear on lake, but two are struggling up gangways on to main terrace. The larger wears boots and short tunic covering only middle of body; the smaller wears boots only, and carries in his arms a lotus almost as large as himself. Both are painted white, with light blue on heads to represent down. Traces of mandarin ducks, crane, etc., remain in foreground.

The *side-scenes* (see *Ch. 0051), incomplete, show on R.: (i) Former incarnation of Ajātaśatru and Śākyamuni; former, as hermit, lying outside his wattled hut, and a man in coat and top-boots apparently dragging him along by hair. Śākyamuni, as white rabbit, pursued at full gallop by horseman with falcon on wrist; spirited drawing. Horseman's costume noteworthy, consisting of long skirt or skirt-like trousers, short cross-over jacket, and on head crimson scarf only, binding hair; cf. parallel scenes in Ch. 00216; (ii) destroyed; (iii) Ajātaśatru pursuing his mother with sword in courtyard of palace; Candraprabha and Jīva not shown; (iv) Bimbisāra in imprisonment receiving visitor (unidentified), of whom skirt-hem only remains; (v) Vaidehī visiting Bimbisāra in imprisonment and taking him a bowl (of food); (vi)

Śākyamuni appearing to Bimbisāra in imprisonment and bringing him bowl of rice; (vii) almost destroyed; but shows traces of Ajātaśatru on horseback meeting two men (incomplete); cf. *Ch. 0051. scene v, etc.; (viii) destroyed.

On L. is Queen Vaidehī meditating on *Sukhāvatī*, as follows: (ix) on setting Sun (amongst mountains) and running Water; (x) on Water, as ice (?); a pond with irregular outline painted white and with white ball in middle; (xi) on the Buddha (Amitāyus); (xii) on Avalokiteśvara or Mahāsthāma; (xiii) on the Buddha (Amitāyus); representation same as in *xi*; (xiv) on Flowery Throne (?), mostly destroyed; (xv) on blue lotus bud, prob. symbol of rebirth, mostly destroyed; (xvi) on blue lotus bud; same as preceding; (xvii) on Water, perhaps as ice; pond of irregular outline as in *x* with black starfish-like marks on white; (xviii) on Water, or the Ground of *Sukhāvatī*; a grey sq. within chequered border; (xix) on Lake of Eight Virtues; a tank subdivided into eight; (xx) on Ground of *Sukhāvatī* (?); a low rectang. block divided into chequered cubes; (xxi) on the Jewel-tree; (xxii) on pavilion, representing Mansions of *Sukhāvatī*; (xxiii) on jewelled canopy.

All side-scenes, buildings, costumes, and accessories in Chinese style as in *Ch. 0051. 5′ 10″ × 3′ 10″.

Ch. lvii. 001. Silk painting with Chin. inscr., representing *Four-armed Avalokiteśvara*, seated, with attendants, side-scenes, and donors. Complete except for border, and in good condition.

Avalok. sits on lotus raised on wide hexagonal pedestal; R. leg bent across, L. pendent and foot supported on small lotus. Upper arms raised with hands turned inwards supporting symbols of Sun and Moon (Sun with bird, two-legged, on L. hand; Moon with conventional tree only, on R.); lower R. hand at breast in *vitarka-mudrā* with willow spray between finger and thumb; lower L. hand on knee carrying flask. Dhyāni-buddha in trilobate setting on front of tiara.

Dress and fig. of 'Indian' type; for former see *Ch. 00102; *lv. 0014. Shoulders extremely broad and waist thin; face square with straight eyes; hair light blue spread over shoulders; jewellery hung with numerous chains of blue and green jewels. Circular halo and vesica of plain concentric rings of different colours; canopy of conventional flower spray hung with jewelled chains; altar in form of flat rock carrying dish of flowers.

On either side of pedestal stand two young attendants, unhaloed, in Chin. official dress, holding rolls of paper; hair parted and done in roll on neck with ribbon binding it as in girl donor of Ch. xxxvi. 001; prob. represent the Good and the Evil Genius as in Ch. lvii. 004, where identity is established by inscriptions.

Side-scenes in secular Chinese style show the 'Calamities' from which Avalok. preserves his worshipper. Above on R.: (i) bound man kneeling, while another holds him by hair and executioner swings sword to cut off his head; (ii) man surrounded by flame being pushed by another over bank into water—the 'fire' and 'water' perils run into one; (iii) man pursued by warrior with lance. On L., above: (iv) two men fleeing from thunderstorm represented by Thunder dragon in circle of drums; (v) man standing surrounded by scorpions and snake; (vi) man standing while large leopard rears upon him, biting at his head. The two last make no attempt to protect themselves.

Donors at lower end consist of two men kneeling on R., and woman on L.; tenth-century dress of same type as in *Ch. 00102. Man in front shown blind on L. eye.

Narrow cartouches placed before donors retain inscrs.; cf. Petrucci, Appendix *E*, II. Panel in centre foreground for dedicatory inscr., and eight cartouches attached to side-scenes and attendants uninscr.

Colouring light and well preserved, consisting chiefly of bright red and light ultramarine blue, with smaller quantity of green and yellow, on greenish-grey background.

Cf. especially Ch. lvii. 004, and (for side-scenes) Ch. xl. 008 and Paradise pictures *Ch. lii. 003; liii. 002; also seated Avaloks. under *Ch. 00102 and 00167. 2′ 10″ × 1′ 9″. Pl. LXVIII.

Ch. lvii. 002. Silk painting with Chin. inscr., representing *Avalokiteśvara* (Kuan-yin) as Guide of Souls, with follower. Complete and in excellent condition; mounted as Kakemono on brown silk with suspension loops at top, but this mount now replaced.

Avalok. stands ¾ L., turning head and gaze back over L. shoulder; both arms bent up from elbows, R. hand carrying smoking censer, L. naturalistic spray of pink lotus and waving white banner with streamers and triangular top, like banners in Collection. Trailing dress, coiffure, and type of features as in *Ch. 001 class of Bodhisattvas; hair black; flesh white, shaded and outlined with pink; eyebrows, small moustache and imperial bright green over black; very small oblique eyes, black. Tiara elaborately orn. with crimson, blue, and pink lotuses, and tassels and borders of robes with bright rosette patterns. Circular halo painted in outline only, with outer peaked border of flame; no Dhyāni-buddha, vesica, or canopy.

Attendant soul on smaller scale stands behind, in guise of Chinese woman with head bowed and hands muffled in wide sleeves on breast. Dress: under-robe with trailing skirt; ¾-length over-jacket with voluminous sleeves, and narrow stole drawn over elbows. Fig. unlike tenth-century type of *Ch. 00102, etc., in brilliant colouring of dress and in absence of metal head-dress and pins. Hair seems to be gathered up from back of head and done high and full above forehead as if over frame, a crimson ribbon apparently keeping front erection in place. It is powdered with gilt stars and other orns., but these are flat and evidently quite light.

Both figs. stand on purple cloud. This sweeps up behind them to top of picture, carrying eye to Paradise to which Avalok. leads his worshippers—a Chinese mansion resting on clouds in L. top corner. In R. upper corner is cartouche, with three chars. only at bottom conveying Bodhisattva's epithet; traces of others (incomplete) on edge.

Picture entirely free of Indian tradition, and in spacing and proportions of great grace and dignity. Colouring soft but bright, consisting chiefly of white, pink, vivid crimson,

copper-green, and dull transparent blue on dark greenish-grey of background. Drawing and workmanship generally of extreme refinement. Prob. amongst latest of paintings in date; cf. for type of colouring Ch. 00216. 2′ 7½″ × 1′ 9″. Pl. LXXI.

Ch. lvii. 003. Silk painting representing *Avalokiteśvara* (Kuan-yin) as Guide of Souls; an inferior and evidently later version of preceding. Complete and in good condition; also mounted as Kakemono, but orig. mount replaced.

Relative size and position of figs. same; Avalok. walks with face turned to spectator, carrying banner on long pole over R. shoulder and censer in L. hand. Dress of 'Indian' Bodhisattva type, with full skirt clearing ankles, and upper half of body mostly bare; fig. ill-proportioned.

Soul behind again in garb of Chinese woman, but stands stiffly erect and is overloaded by voluminous white skirt with long train, and full-length blue coat with large rosette pattern in red and maroon borders orn. with cloud scroll. Hair done in high narrow top-knot with few thin pins stuck through it and light flower orn. in front. Mass of cloud scroll under feet of both. Across top of picture three straight bands of shaded green and yellow, on which are distributed at regular intervals eight miniature pavilions representing Paradise to which Avalok. leads his devotee.

Colouring chiefly white (on flesh), orange, deep olive, crimson, and jade-green on light grey background; careful execution, but no line. 2′ 9½″ × 1′ 9½″.

Ch. lvii. 004. Silk painting with Chin. inscr., representing *Avalokiteśvara* (Kuan-yin) seated, with attendants and donors. Date given by inscr. A.D. 983. In good condition with border made of strips of thin silk, blue, pink, brown, and crimson, symmetrically arranged.

Avalok. sits on scarlet lotus with R. leg bent across, L. leg pendent; R. hand in *vitarka-mudrā* at breast, L. on knee holding flaming jewel. Large Dhyāni-buddha forms front of tiara. General type of fig., dress, and accessories as in Ch. 00167, but poorly drawn. Canopy of conventional flower spray, with naked kneeling infant descending on cloud upon each side. In front no altar, but flat-topped rock supporting dish of conventional lotuses. Attendants consist of two young men standing on clouds upon either side and holding rolls of paper; dress and coiffure as in Ch. 00124 (q. v.); see also Ch. lvii. 001. Inscriptions here describe them as 'The good youth worshipping', and 'The evil youth worshipping'; for their significance see Petrucci, Appendix *E*, III. x.

Chief interest of painting lies in donors, who are exceptionally numerous and represent entire family of an official of Tun-huang who dedicated the picture. They are ranged in two rows, standing; on R. above, the official, with three sons; on L. above, wife and daughters; on R. below, four grandsons; on L. below, daughter and granddaughter-in-law, also two young granddaughters (?). Dress of grown people is that of donors in *Ch. 00102, ladies wearing necklaces and patches by way of orn. The little girls wear skirts and jackets like the women's, but their jackets are scarlet and sleeves less wide; the little boys wear long white trousers and scarlet long-sleeved tunics with green frill round hem and white belts. Hair of all children parted, and falls in two short locks on either side of face, while on top of head is orn. like wide scarlet bow with green centre.

For details of inscrs., consisting of dedication 4 ll., one short line by each donor, one by each of attendants (referred to above), and salutation to Kuan-yin, see Chavannes, App. *A*, V. B.

Colouring scarlet, green, pale yellow, and bluish grey, on almost white background, with black and bluish green in lower half; crude light tints, thinly applied; poor drawing. Painting 2′ 11″ × 1′ 11″, with border 3′ 5″ × 2′ 6″. Pl. LXVI.

Ch. lviii. 001. Large silk painting with Chin. inscr., representing *Paradise of Maitreya*; complete (except for side-scenes, if any) and in excellent condition. In composition follows general lines of *Ch. 0051, etc., but has series of legendary scenes from the *Maitreyavyākaraṇa-sūtra* along top. At bottom there is shown the construction of a Stūpa, with three-tiered umbrella above and long altar laden with flasks, begging-bowls, jewels, and bundles of manuscript rolls on either side. Two important groups in bottom corners represent conversions to the Law. These subsidiary scenes and groups are not formally separated from Paradise proper, but merge into it at bottom and are above only divided from it by range of pine-clad mountains.

Maitreya appears to sit in European fashion, but holes in silk make his attitude not quite certain. His R. hand is in *vitarka-mudrā* at breast, his L. horizontal below it, with fingers curved and palm downmost, possibly holding flask. His company consists of two principal Bodhisattvas; two monkish disciples, one of whom is grotesquely hideous, the other normal and round-faced; two Lokapālas (Virūpākṣa, Vaiśravaṇa) holding resp. sword and pike; two Dharmapālas in fury, one holding club; two nymphs at altar, offering flowers; and two subsidiary Buddhas, who are seated at side-altars with Bodhisattvas of their own.

The dancer is attended by four musicians, playing on clappers, flute, and mouth-organ of straight type; her arms flung out about to strike small drum which hangs at her waist. On small projection of her terrace stand two infant boys, attired in red tunics and scarlet boots, and holding up dishes of flowers. Whole terrace rises on piles from lotus lake shown with curling waves; no souls rise from its flowers.

Inscr. scenes at top and bottom are in secular Chinese style and illustrate episodes of *Maitreyavyākaraṇa-sūtra*. Cf. Petrucci, Appendix *E*, III. v; also for interpretation of attendant divinities.

The scenes below, which represent conversions to the Law and the construction of a Stūpa (see Petrucci, *Annales du Musée Guimet*, xli. p. 128), show a group of men with saddled horses on R. and another of women on L., with a palanquin. Chief personage on either side seated upright on square sitting-platform with hands on knees and feet on stool, while his (or her) head is shaved resp. by monk or nun. Attendants stand by with hands in adoration, or kneel holding a cloth or

dish to receive the hair. Four men holding rolls of paper stand behind on man's side, and four women or girls with hands in adoration on woman's. In corner on R. men's three horses, one red and two white, held by groom; on L. palanquin with four bearers. Palanquin is hexagonal, with pagoda roof, and its upper part divided into small square panes coloured scarlet, green, and blue.

The seated persons wear white under-robes, crimson tunics or under-jackets, chocolate over-jackets, and white scarf (or barber's towel?) round shoulders. The dress otherwise as descr. for civilians in Ch. lv. 009, side-scenes of *Ch. 0051, etc. The ladies' hair done in top-knot with two high loops; the girls' in bunch on either side of head with short lock hanging from each, as the boy's in Ch. liv. 006. Women's complexions white with vermilion on cheeks, men's a uniform brownish pink. Horses well drawn, with small heads, thick necks, well-developed chests and croups, and slim legs. Their harness consists of simple head-stall and reins, breast-band, crupper, and saddle with high pommel back and front covered with long saddle-cloth, which may hide other details of harness.

As a picture the painting suffers from overcrowding of detail and lack of insistence on any main fig. or group. Colouring a mosaic chiefly of dull red, green, slate-colour, and flesh-pink, with coarse light blue used profusely on haloes in conjunction with white; workmanship of second class.

4′ 6″ × 3′ 10″. Pl. LVIII. *Thousand Buddhas*, Pl. IX.

Ch. lviii. 002. Fr. of large silk painting representing *Six- or Eight-armed Avalokiteśvara* seated with attendants, but both colour and drawing almost effaced. On L. edge traces of central deity holding up Sun or Moon disc; further to R. attendant Bodhisattvas and monk, more distinct. Remainder shows confused traces of various subjects painted over each other, and all practically obliterated.

3′ 11″ × 2′ 2″.

Ch. lviii. 003. Dated silk painting with Chin. inscr., representing *Kṣitigarbha* as Patron of Travellers and Lord of the Six Gati, with attendants and donors. Inscr. dated A.D. 963. Complete with border of (faded) purple silk gauze and suspension loops, and for most part excellently preserved. For similar representations, see under *Ch. 0021.

K. sits facing spectator on scarlet lotus veined with white, L. leg pendent, R. bent across; R. hand holding beggar's staff, and L. transparent ball of crystal. Under-robe shaded red and green; mantle of red and black inwoven on white ground, and barred with black; head-shawl dark grey orn. with yellow spot pattern and having scarlet border figured with green and white wheel-like flowers. Flesh is faintly coloured with pink over green-grey of silk; face full, heavy, and straight-featured as in *Ch. 0021.

In front of him, on flat-topped rock covered with flowered altar-cloth, stands large green bowl containing open lotus; and on either side sits or kneels, in adoration, Bodhisattva in scarlet skirt. These are designated in inscriptions beside (see Petrucci, Appendix *E*, III. ix), but type not individualized.

From either side of K.'s circular red and green vesica rise above Bodhisattvas three waving rays of scarlet; on each stand small figs. representing Six Worlds of Desire. These are, on R.: (i) man for World of Men; (ii) four-armed deity holding up discs of Sun and Moon, for the World of Gods; (iii) a *preta* amongst flames for World of Hell. On L.: (iv) Bodhisattva for World of Demi-gods; (v) silk broken; (vi) demon with pitchfork and caldron for World of Demons.

Donors (two women kneeling on L. and two men on R.) finely drawn and among best examples of type *Ch. 00102 in dress, colouring, and coiffure. For particulars of inscriptions relating to them and of dedicatory inscription, see Petrucci, Appendix *E*. II. Cartouche for latter here takes form of a stone slab on sq. lotus base.

2′ 3″ × 2′. Pl. LXVII; *Thousand Buddhas*, Pl. XXV.

Ch. lviii. 004. Painted silk banner; much cracked, upper end of painting and all accessories lost, but colour fresh.

Subject: *Bodhisattva*. Stands ¾ L. on yellow and red lotus, shoulders thrown back and head erect; hands joined before girdle, palms towards each other and slightly raised, fingers of each straight, pointing upwards, and crossing regularly with fingers of other. Top of head, and all above, lost. Good example of highly finished 'Chinese Buddhist' type of *Ch. 001, etc., and very decorative owing to its bright colours and flowery adornment of dress and jewellery. Colouring chiefly rich crimson and blue (on shawl-like stole and most of the minor details), with moss-green on scarf, salmon-pink on skirt, and green on skirt-border figured with half-rosettes alternately orange and purple. Lotuses strung on long chains, crimson, blue, purple, and green.

Face of more character than usual, owing to thinner contour of cheek, and well-marked chin and angle of jaw. Inside of ears and hands, and soles of feet, outlined red. Cartouche to L. of head blank, but two Chin. chars. inscr. lower down on L. edge. 2′ 4½″ × 10½″. Pl. LXXXI.

Ch. lviii. 005. Lower end of painted silk banner, with two bottom streamers of discoloured green silk.

Subject: *Bodhisattva*. Fig. preserved below knees only, standing ¾ L.; draperies and style of work as in *Ch. 002. Colours preserved; scarlet, olive-green, pale blue.

Painting 8½″ × 7″, length with streamers 3′ 6½″.

Ch. lviii. 006. Large silk painting in bundle, showing condition in which most were originally recovered. This painting, however, has suffered less than some, owing to an (original?) backing of strong paper which it still retains. Subject apparently a *Sukhāvatī* on lines of *Ch. 0051, etc., with Vaidehī legend at sides, and workmanship of mediocre quality.

Length of bundle as rolled up *c.* 1′, girth *c.* 1′ 5″.

Ch. lviii. 008. Fr. of paper painting in two pieces, representing a draped valance, hung with vandyked tabs, streamers, tassels, and jewelled chains; cf. silk valances Ch. 00278–9. Fabrics patterned with repeating rosettes; colours dull red, blue, yellow, and olive-green. Paper

suspension loops at top. Rough work, in fair condition. Length 1′ 10″ and 2′ 3″, depth 9¼″.

Ch. lviii. 009. Paper painting with Chin. inscr., representing *Bodhisattva Vajrapāṇi* with donors. V. seated on lotus with legs interlocked; R. hand holding Vajra at breast, L. at hip the Vajra-topped bell; both emblems painted green. Dhyāni-buddha on front of tiara. Dress and orns. like Avalok.'s in *Ch. 00102, etc.; circular halo and vesica; flowery branch as canopy. Colouring dull red, green, pink, slate-blue, and yellow; rough work; condition good.

At bottom, donors standing; civilian in white belted coat and round black head-dress, with rosary and flask, on L.; monk in black and yellow robes, with censer, on R. In middle, narrow panel with name of Vajrapāṇi, between green cartouches with inscr. relating to donors (partly destroyed). 1′ 7⅝″ × 11½″.

Ch. lviii. 0011. Large silk painting, representing *Paradise of Amitābha* (*or Śākyamuni?*). Side-scenes and extreme top and bottom lost; condition otherwise good. Composition and general treatment as in *Ch. lii. 003.

Pose of presiding Buddha as in *Ch. 0051. Bodhisattva on L. (Mahāsthāma) has R. hand also in *vitarka-mudrā*, L. hand held out horizontally palm up; the other (Avalokiteśvara) has hands in attitude of adoration. Attendant host consists only of Bodhisattvas, dancer, and musicians, without priestly disciples, but with subsidiary Buddhas and attendants on separate terraces in bottom corners.

The Bodhisattvas mostly have their hands in adoration. Six musicians play on lute, mouth-organ (teapot-shape), clappers, psaltery, and pipe; but the lutes have a rounder body than in *Ch. lii. 003, and head of one is bent at right angles and then again at right angles to take its former direction. On gangway going down to water before the dancer is a stand decked with scarves and streamers, and apparently carrying a two-handled jar containing scarlet lotuses and leaves. Amitābha's altar shows specially good example of draped valance, with triangular tabs and streamers, like Ch. 00278.

Rocks and lotus flowers rise from water; and though no infant souls are shown on latter, two with clasped hands, kneeling on lotuses, float up gangways on to terraces of corner Buddhas. In centre foreground a black-tiled raft or platform on which are assembled Garuḍa, peacock, crane, and a smaller bird, prob. duck, now destroyed. Less space than usual is devoted to Celestial Mansions, and in any case they are incomplete.

Workmanship is good and well finished, and surface on the whole excellently preserved. Prevailing colours are crimson, orange-yellow, putty-coloured grey, and white on dull green background; the white being largely used on decorated haloes and Padmāsanas, as well as for flesh of all attendant figs. There is a marked absence of black and blue, the floor of main terrace being dull green, and roofs of buildings very light brown.

Instead of usual band of lozenges, the Paradise was separated from side-scenes by a running scroll of leaves and flowers, green and orange, on band of dark brown. 4′ 2″ × 3′ 1″. *Thousand Buddhas*, Pl. VIII.

Ch. lxi. 001. Painted silk banner; considerably broken, but remains in fair condition. All accessories lost except head-piece and one side-streamer.

Head-piece of loosely woven white silk, sides continuous with those of painting, but pointed end bound with silk of deep bog green, 2¾″ wide. Bare wooden stiffener passed across front, with ends thrust into binding; whole evidently a substitute for original top. At apex suspension loop of white silk strung with small iron (?) ring. The remaining side-streamer of pale lavender silk, doubled and sewn. Colouring well preserved.

Subject: *Vaiśravaṇa, Guardian of the North,* stands facing spectator on knee and shoulder of seated demon; weight thrown markedly on L. hip, R. foot higher than L. R. knee bent, and R. side much relaxed. R. hand above shoulder grasps long black staff of pike; L. gathers up folds of stole at hip; head leans over L. shoulder. Pose that of 'Indian' type of Lokapāla, Ch. xxvi. a. 006 (see also *General Note*, *Ch. 0010), and dress a variation of same.

Scales of coat of mail are oblong, with nicked edge, on skirts, and seem from shading to overlap upwards; on body and upper arm they are round-edged. On skirts and body they are painted red and yellow; on arm red and green. Corslet red, tight-fitting, and comes down to waist, but most of it covered as in Ch. 0085 by wide breastplate, here pale yellow or white orn. with gold volute and boss orns. Heavy dark red and olive stole knotted to black hip-belt and draped across arms; ends of black and red mantle (?) seem to appear under chin. No flaps over hips, but white apron, trefoil-shaped, hangs from belt in front.

Skirts of coat of mail reach to knees, hiding all but floating ends of orange and white skirt and girdle. White breeches tucked into greaves and orn. with black leaf pattern on knees. Both greaves and arm-guards are painted in horizontal bands of red and white, separated by narrower bands of yellow; shoes black orn. with gold,

Face contorted in expression of rage, mouth wide open showing both rows of teeth, forehead contracted, and large round eyes with yellow eyeballs gazing fiercely to R. Ears elongated, with jewelled ear-rings. Flesh shaded with glowing orange-red on natural cream of silk. Head-dress a species of tiara, with red cap over crown of head, and at sides gold wing orns. and white streamers flying up. Three-lobed top-knot (black) rises above; rest of hair falls behind shoulders. Halo is pale yellow or white, paint now much lost, with crown of flame on top.

Demon is of monster type, painted dark red, with grey *dhōtī*, heavy necklace and ear-rings, and upright green hair. He sits erect, R. hand holding end of pike-staff on thigh, L. clasping Lokapāla's leg. Pike-head is a trident, all three points in this case present (cf. Ch. 0018, etc.); though the L. hand spike is shorter and has pennon attached. Brown cartouche for inscr. to R. of head, blank.

Fig. is stiff, and colouring dark and heavy, but well preserved.

Painting 1′ 10″ × 7¼″, length with head-piece 2′ 7¾″.

Ch. lxi. 002. Two frs. of painted silk banner, in themselves almost intact, and in fair condition; both ends of painting lost.

Subject: *Scenes from Life of Buddha*; Chinese in style; parts of three preserved, two almost complete.

Scene 1. *Farewell of Chandaka and Kaṇṭhaka.* To L. on open ground Prince sits upon rock, and before him kneel Ch. and K. Prince and groom raise their sleeves to their eyes, their faces expressing deepest dejection; the horse kneels on its fore-knees, laying its head to ground.

Scene 2. *Departure of Chandaka.* Lower half of scene lost. There remains to L. Prince seated upon ledge of steep rock, to R. grassy slopes on which grow pink-flowering trees, pear or peach. At bottom are just visible heads of Ch. and K. moving away. Prince's gaze is fixed on distance, his R. hand raised in salute, a look of horror on his face. On rev. both his hands are muffled in his sleeves.

Scene 3. *Pursuit of Śuddhodhana's Messengers.* A very expressive scene showing group of five horsemen, half hidden behind slope of hill and plunging behind another to L. They ride close together, bending forward and turning their heads towards each other. The horses' tails tied up in knots, and tails of riders' caps fly in breeze. They wear long coats, resp. of yellow, terra-cotta, green, blue, and crimson; horses are dappled white and roan. On foreground of hill grows graceful weeping-willow, which fills L. side of scene, flowering shrubs and large-leaved ground plants. Composition of scene is admirable; drawing spirited and life-like, concentration and movement of the horsemen vividly expressed.

Treatment of scenes (1) and (2) is not so striking, and drawing more faulty, e. g. Kaṇṭhaka's pose and proportions; but the attitudes of human actors are expressive. Prince wears wide-sleeved black jacket lined with white, and pink under-robe; Chandaka pink jacket and high sq. black cap. Prince's hair is dressed in stiff four-pronged form seen also in Ch. xlvi. 004 and lv. 0011, 0012. The riders' coats and black-tailed caps are of usual kind descr. in Ch. xx. 008, etc.; Kaṇṭhaka is as usual white with red mane and tail. Parts of two cartouches (yellow, blank) for inscr. appear on each edge in each fr.

For representations of the same scenes, cf. Ch. xx. 008; xxvi. a. 003; xlvi. 004, 007; lv. 0012; and especially Ch. 0071.

Upper fr. 7½″ × 7½″; lower, 5½″ × 7½″. Scene (3) Pl. LXXVI.

Ch. lxi. 004. Painted silk banner with Chin. inscr. Considerably broken and all accessories lost, but silk clean and colours fresh.

Subject: *Kṣitigarbha* as monk. Same as *Ch. i. 003 in pose, dress, accessories, physical type, and style of workmanship. But long-necked round-bodied flask hangs from fingers of R. hand; down on shaven head, upper lip, and chin is painted blue; inside of ears, hands, and lower lines of feet are painted red. There are no ear-rings; mantle edge drawn over R. shoulder. Mantle left natural grey of silk, barred with black and mottled with patches of scarlet, green, and blue; under-robe light green with purple border; lining of both robes scarlet. Inscr. naming Kṣ. as *Ti-tsang* is on cartouche to L. of head.

2′ 0½″ × 6¾″.

Ch. lxi. 006. Painted silk banner, considerably faded and broken. Four bottom streamers with weighting-board preserved, all other accessories and upper end of painting lost. Streamers of fine greenish-grey silk gauze, the ground woven in minute open-work pattern, with repeating 'diamond spot' in closer weave—the spot consisting of various lozenge-shaped forms set angle to angle. Weighting-board painted dark red with rows of circular black flowers outlined yellow.

Subject: *Dharmapāla Vajrapāṇi,* of Chinese grotesque type as in Ch. 004, etc. In attitude, drapery, etc., practically identical with Ch. 004, but face different, with lipless mouth close shut, and short tusk projecting at corner. *Dhōtī* scarlet, border and stole dark olive and grey; jewels light green and red; lotuses under foot, scarlet and pale grey-blue; halo grey with creeping flame border. Modelling shown as in Ch. xxvi. a. 005, but paint much faded.

Painting 1′ 8″ × 6⅞″, length with streamers 5′ 3″.

Ch. lxi. 007. Painted silk banner; all accessories lost; edges of painting broken, but fig. almost intact.

Subject: *Bodhisattva.* Stands ¾ L. on light blue lotus, hands crossed one over another and hanging low before body; thumb and first finger of each apparently joined. For others in same pose, see Ch. 003; iii. 001; xl. 004. Fig. and painting of type *Ch. 002. Stole has slipped off shoulders, and fig. bare to girdle except for jewellery. Face has serious expression; mouth large and full; eyes long and slanting with grey irises looking up under down-cast lids; ears almost normal and not pierced. Colouring well preserved; chiefly light blue and green of rather thin tone, and dark, rather muddy, pink, with small amount of crimson and purple. Drawing rough, or defective, in places. Yellow cartouche for inscr., to L. of face, blank. 1′ 9½″ × 6¾″.

Ch. lxi. 009. Silk painting representing *Kṣitigarbha* as Patron of Travellers, Regent of Hell, and Lord of the Six Gati, with attendants and donors. Of indigo blue silk, much broken, and on all edges incomplete; colour however well preserved. For other representations, see under *Ch. 0021.

Kṣ. sits on vermilion lotus, L. leg pendent resting on small lotus, R. bent across. R. hand holds beggar's staff; L. raised and held outwards empty, palm uppermost, second and third fingers bent up. Dress: gamboge under-robe with vermilion border, and mantle of mottled indigo, yellow, and vermilion with maroon border, while traveller's shawl of maroon, sprinkled like robe borders with gilded diamonds, drapes head and shoulders. Face and breast gilded, but hands, arms, and feet painted light red.

From circular halo and vesica of indigo, vermilion, and white surrounding fig. spread out on either side three waving rays of same colours, intended to bear representatives of Six Gati as in Ch. lviii. 003; but figs. here not drawn in.

On either side of him stands fig. with hands in adoration, prob. donor and wife. Both wear white under-robes and loose-sleeved coats of maroon or scarlet; but hair of one is done in two knobs on top of head (as in Ch. lvii. 004, attendants on Avalokiteśvara), and that of other in roll on neck, prob. a woman's coiffure (see Ch. xx. 005; xxxvi. 001). Behind man stands another whose significance is uncertain, holding object which may be handle of fly-whisk (tail not being drawn), but resembles loop of string stretched between fingers. Behind wife stand two other men, carrying resp. small and very large roll of paper. These three all wear outdoor Chin. man's dress, long belted coats, and (the two latter) black-tailed caps.

The Ten Infernal Judges kneel five upon either side in slanting rows extending to bottom corners of picture. In foreground crouches the White Lion, with 'soul' in guise of ordinary man standing at his head, and priest on other side, with grotesque features, raising his hands to Kṣitigarbha.

Judges all wear magisterial dress and carry rolls of paper. Lion extremely conventional, and evidently drawn from stone carving with no realization of beast itself. Many small cartouches, yellow and vermilion, distributed about painting, but none inscr. Faces show some endeavour at individual characterization, but drawing throughout is scratchy. Value of picture lies in its strong and impressive colouring.

1′ 7″ × 1′ 5″. *Thousand Buddhas*, Pl. XXXIX.

Ch. lxi. 0010. Silk painting with Chin. inscr., representing two standing Bodhisattvas, prob. *Avalokiteśvara* (Kuan-yin), with donors below; much broken and damaged. The figs. are in 'Chinese Buddhist' style of *Ch. 002, and stand facing each other, ¾ R. and L., holding in hands nearest each other resp. purple and scarlet lotus bud. Their other hands are held horizontally before their breasts, thumb and forefinger joined. Greater part of both heads and much of figs. lost. Between them stands large vessel holding scarlet and purple lotuses and buds. Donors at bottom consisted of two men kneeling on R. and two women on L.—type as in *Ch. 00102, etc., but figs. are almost effaced. Beneath, but within red silk border, is sewn a strip of another painting, also representing donors but not carrying on lines of the painting above. It shows on L., beneath women, knees of two kneeling men, and on R., under men donors, a Padmāsana.

The inscriptions were placed on (1) narrow cartouche between heads of two Bodhisattvas, and (2) another between two donors; but both practically destroyed, though an attempt has been made to save lower one, by patching it behind with piece of yellow silk. 2′ 7″ × 2′ 0½″.

Ch. lxii. 001. Linen painting representing the *Six-armed and Eleven-headed Avalokiteśvara*, seated, with attendants and donors. Complete with dark grey linen border and suspension loops, but painting much worn. General arrangement of pictures, figs., accessories, and treatment as in the silk paintings descr. under *Ch. 00102; and donors of same type.

Attendants consist of: ten small Buddhas in a line along top; four Lokapālas and two demons divided below upon either side; 'Sage' and 'Nymph of Virtue' on L. and R. resp. (see *Ch. 00223, etc.); and Bodhisattva on either side of altar. Colouring (mostly lost) consisted chiefly of light red and green, and reddish brown. Donors: three men on L., and four women on R.

Painting 3′ 7½″ × 2′ 1¼″, border 2″.

Ch. lxiii. 002. Paper painting, with paper border and linen suspension loops, showing *Kṣitigarbha* as Protector of Souls in Hell; a simplified form of *Ch. 0021. Kṣ. sits on scarlet lotus behind draped altar; no rocks appear. Attitude and dress same as in *Ch. 0021, but attitude reversed. Head-dress dark pink with yellow spots. On one side of altar stands monk, on other sits lion; behind each of them stand five of Infernal Judges, with one or two small attendants, all holding rolls of paper. Judges here all attired in magistrates' robes, wearing tall black hats with small brims and divided crowns. Small cartouches (blank) for inscrs. are beside each.

Upper corners filled by two small seated Buddhas, and lower end of picture by donors. These consist of woman and little girl on L. and two men on R., kneeling on either side of blank panel for dedicatory inscr.; dress, etc., as in *Ch. 00102.

Drawing rough; colouring limited to dull red, dark pink, slate-colour, yellow, and green. Painting considerably broken where green used; otherwise in fair condition. 1′ 11″ × 1′ 5″.

Ch. lxiv. 001. Painted linen banner, with head-piece border and remains of streamers of light buff and dark brown linen. Good condition.

Subject: *Bodhisattva*, standing ¾ R.; R. hand by side, L. horizontal across breast, back outwards. For general style, see note under *Ch. i. 0016. Colouring red, yellowish brown, blue-grey; bad drawing.

Painting 2′ 10″ × 9½″, length of whole 7′.

Ch. lxiv. 002. Painted linen banner, retaining head-piece border of brown linen, but no streamers. Clean and good condition.

Subject: *Avalokiteśvara* (?), standing facing spectator, with hands in adoration. For general descr. of type and list of similar banners, see *Ch. i. 0016. Colouring dull crimson, grey, slate-blue, and green. 3′ 3″ (with head-piece) × 1′ 1″.

Ch. lxiv. 003–5. Three painted paper banners, from same series as Ch. xx. 0015 and xxii. 0032, showing *Bodhisattvas*. Figs. in 003 and 004 same as in xx. 0015; fig. in 005 same as in xxii. 0032. Workmanship and colouring same; colours sometimes transposed. Paper often broken away where green has been used. Side streamers and part of bottom streamers of 004 lost.

Paintings 1′ 5″ × 6½″ to 7″; average length of banner 3′ 3½″.

Ch. lxvi. 002. Paper painting with Chin. inscr., representing *Six-armed and Eleven-headed Avalokiteśvara* (Kuan-yin), standing, with woman donor and child. From inscriptions (see Petrucci, App. *E*, II) it appears that the painting was dedicated by woman, in gratitude for a daughter, to Kuan-yin as the Giver of Life. Body discoloured though complete, and details hardly distinguishable.

Avalok. stands on lotus rising from tank; dress and orns. those of Indian Bodhisattva, as in *Ch. 00102, etc. His upper hands hold up discs of Sun and Moon; Moon (in R. hand) containing tree, hare, and frog; Sun (in L.) showing three-legged bird. His middle hands seem to be in *vitarka-mudrā* on either side of breast; his lower hands are held down by sides, thumbs and forefingers apparently joined and other fingers extended. Circular halo forms background to fig. down to level of these hands. Above is usual draped canopy hanging on red-flowering trees.

Donor kneels on R. holding censer; she wears green skirt and red and white jacket; her hair dressed like donors' in *Ch. 00102, etc. Child (a boy) sitting on L. is on larger scale and has been cut out from another piece of paper and pasted on. He sits playing the guitar, wears only red sleeveless tunic, and is shaved except for curl on forehead.

Lines of Bodhisattva's robes and his ornaments and those on canopy were orn. with gilding laid on upon narrow strips of paper or in a mass upon a patch of resin. Most of it has been removed or lost. Drawing poor, and colouring principally dark red and green.

Painting pasted on larger piece of paper forming border, and whole mounted again on still larger piece of coarse linen with long string of same sewn to top. Linen border was further orn. with series of silk and paper flowers made on principle of Ch. 0077, 00149; a row of them preserved along the lower edge. On L. upper side a small projecting flap of linen, pasted over with square of paper stamped with rows of minute seated Buddhas. On its outer edge again were leather loops, of which one remains.

Inscr. placed on narrow cartouches on R. and L. edge of painting. Painting 1′ 6″ × 11¼″, with mount 2′ 4¼″ × 1′ 8½.″

Ch. cii. 001. Painted paper roll, incomplete, illustrating Chinese Buddhist hell. Scenes from R. to L. represent:

(i) Four of Infernal Judges sitting in judgement; (ii) one of Judges sending souls back into Six Worlds of Desire; (iii) one of Hot Hells; (iv) Kṣitigarbha in monk's guise receiving souls driven by demons.

(i) Four judgement scenes much alike. Judge sits at draped table; on either side of him stands attendant, who from her dress, red cheeks, and hair parted and done in roll round her neck seems to be a woman (?). Before Judge condemned souls wearing cangue, and often, with a similar instrument confining their hands, led by lictors. Condemned wear only white *dhōtīs*; their hair tied in bunch. One in third scene is being beaten; others are tormented by lictors, who force their heads round by twisting their hair on long projecting handle of cangue. Lictors mostly human in appearance, though one has horns and another an ox-head; they wear long white trousers, under-tunics, coats with long skirts, and black two-eared caps. Majority carry hatchets or clubs.

Two other figs. also occur in each scene: a man and woman in Chinese secular dress (see donors in *Ch. 00102), the man carrying a bundle of manuscript rolls, the woman an image of Buddha. They are always walking away from rest of group, and may represent souls who by their piety have passed the judgement successfully. In last of these scenes a second man is with them, carrying Buddha image like the woman.

Judges, bearded, wear green or crimson robes with wide out-flying sleeves, and round black hats with high stiff brim standing up all round except over forehead, and rising to peak at back. A curious nail-like orn. seems to project over forehead and runs out behind in point, like large hat-pin. Their faces heavily shaded with dark brown to make aspect more terrible.

(ii) Fifth Judge has only one of female attendants beside him; other stands in front scanning long scroll which man unrolls before her. Behind her stands another man in armour and long trousers carrying hatchet; but there are no condemned souls. To L. spreads out fan-wise series of six black clouds, on which stand representatives of Six Worlds of Desire. On topmost cloud six-armed god, like six-armed Avalokiteśvara in Ch. i. 0017, etc., holding up discs of Sun and Moon in his upper hands, sword and trident in his lower hands, and with his middle pair of hands in adoration at his breast. His flesh is painted black. On second cloud another Bodhisattva, with flesh painted pink, and one pair of hands in adoration at breast. On third cloud stand man and woman in Chinese dress representing World of Mankind; on fourth, horse and two-humped camel representing World of Animals; on fifth, fig. clad in white *dhōti* with red hair and outstretched arms, representing the World of *pretas*; on sixth, ox-headed demon stirring with pitchfork contents of boiling cauldron. Cf. also Ch. lviii. 003.

(iii) seems to represent one of Hot Hells. It is on different sheet of paper from (ii); R. end has been cut off before it was joined to roll. It shows part only of high black-walled enclosure, with shut doors and dogs (?) mounting guard on corner piers. From these also spread flames. Within, a man lies stretched on his back on low couch, eyes closed and arms straight by sides.

(iv), which follows on, without break, to L., shows condemned souls wearing cangue, driven along by ox- and horse-headed demons who brandish goad and whip. Before them Kṣitigarbha, in monk's yellow robe and red mantle, carrying begging-staff over L. shoulder and alms-bowl in R. His face round and childish; head unhaloed and covered with close-cut black hair.

Drawing spirited, but rough in detail; colouring limited to coarse shades of red, yellow, green, and grey besides black; condition of whole roll very good.

8′ 2½″ × 11″. Pl. XCIII and (fig. of Kṣitigarbha) Pl. CIII.

Ch. ciii. 0014. Chinese painted roll with woodcut, dated A.D. 868. Text, *Vajracchedikā*; colophon, 'Printed by Wang Chieh on the 15th day of the 4th moon of the 9th year of Hsien-t'ung', i.e. May 11, A.D. 868. The earliest woodcut known to exist, and the earliest dated specimen of printing.

Woodcut shows Buddha, cross-legged on lotus throne, discoursing to his aged disciple Subhūti, who kneels on mat in L. corner with hands in adoration. Buddha placed $\frac{3}{4}$ L.; R. hand held out with thumb and third finger joined, L. hand in lap; Svastika marked on breast. Circular halo and vesica, flame-edged; canopy and flowering boughs overhead; two nymphs floating on clouds, with dishes of flowers in their hands. Before B. is altar with sacred vessels; on either side of latter, lion lying down, and demonic guardian in warlike pose. One on L. stands on lotuses and brandishes thunderbolt; one on R. stands on rock, and gesticulates with clenched fists. Behind B. crowd of monkish disciples, and two Bodhisattvas; in R. bottom corner stands Chinese dignitary, in official robes and head-dress, with two men and boys attending him. Floor paved with square tiles orn. with floral pattern. Two small cartouches with Chin. chars. on L. edge. Block finely cut. Roll in excellent preservation and complete.

Roll 16′ × 10$\frac{3}{4}$″; woodcut 11$\frac{1}{4}$″ × 9$\frac{1}{2}$″. Pl. C.

END OF VOL. II.

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